THE

MEDICAL AND SURGICAL REPORTER.

No. 1422.] PHILADELPHIA, MAY 31, 1884. [Vol. L.—No. 22.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

WORK OF WOMEN PHYSICIANS IN ASIA.

BY MARY H. STINSON, M. D.,

Of Norristown, Pa.

(*Continued from page* 652.)

Since 1869, there have been sent to India 15 women medical missionaries, one for each year since that time.

By	The Woman's Bd. of For. Miss. of the Pres. Ch.	1
"	" " " " Am. For. Miss. (Congits.)	1
"	" " Union Miss. Society	2
"	" Lutheran Church	1
"	" Woman's For. Miss. of the M. E. Ch.	5

I have received replies from five of these medical missionaries to inquiries concerning the diseases of women and children. The diseases of the latter seem to be about the same as with us, but of a milder type. They do not mention scarlet fever or diphtheria, but eczema is much more common, and there is some leprosy and dengue among them. Concerning the age of puberty it was difficult to be exact, as few knew their ages, but nine to fourteen years were the extremes mentioned. Mothers of thirteen and fourteen years were common. Their children were very small, but appeared healthy. Infant marriages were deplored. These often caused the wife to go to live with her husband before puberty—always as soon as the menses have occurred, when she becomes the slave of the mother-in-law. A large majority of the boys in the high school are fathers. What would you expect to be the mental capacity of the children of these boys and girls? There are now in India 21,000,000 of widows, many of whom are widows by the death of the boys to whom they were betrothed in early childhood and were never married, but yet have to live under all the abuse and cruelties that are permitted to be heaped upon widows.

Labor was considered tedious and painful as a rule. Two reported the employment of midwives to be so universal that they had never been called to such cases.

Rupture of the perineum was very frequent, that of the cervix uteri less frequent. Diseases peculiar to women were of the same general character as at home, but aggravated by bad treatment during and after parturition, and by subsequent neglect.

Neuroses and insanity do not appear to be very frequent. Puerperal cases had been seen. Hard work and an undue anxiety to be mothers of sons were given as possible reasons thereof. The birth of daughters is a dire calamity.

To the question, "What provision is made for the care of the insane?" came, "Hospitals are provided." "The provision by the English Government is very primitive." "Government asylums badly kept."

Dr. Anna S. Kugler, late assistant physician in the Woman's Department of the Southeastern Hospital of Pennsylvania, who had been only a short time in Guntoor, India, had learned of but one hospital for the insane in southern India, which was located in Madras. This she had visited, and was much pleased with its management, and they were having excellent results from the open door system.

In 1874, we should note two events: "The Medical Prayer Union" was established in London, which in 1878 numbered 220 doctors and

medical students. They met weekly for prayer and the study of the Bible. Also, when the University of Edinburgh was closed to women, the remedy was sought in the founding of "The London School of Medicine for Women," which was opened in October, 1874. Obstructionists prevented women being admitted for examination by the various medical boards until 1876, when an act to empower all medical boards to admit women became law. The Irish College of Physicians took the initiative, and within the last seven years 38 women have obtained diplomas from this college.

In 1878, the University of London, after a severe contest among its own members, agreed to admit women to its medical degrees. This led ultimately to their admission to all the faculties, and "it is understood that when certain new arrangements are completed between the Royal College of Physicians and of Surgeons of England, the admission of women to their examinations will be included in the programme, and this event will certainly give the final blow to the policy of male monopoly in medicine."

The course of study and of examination is very protracted in the University of London, and it is a very great satisfaction to be able to record that already three women have graduated as "M. B. Lond."; and that in two cases the golden medal of the University has been awarded to women, after competition with all the students of the year —in anatomy to Miss Helen Prideau in 1881, and in obstetrics to Mrs. Scharlieb in 1882.

One of these graduates of the London School of Medicine for Women, Miss Jane E. Waterson, M. D., is the first woman medical missionary sent into Africa, "that garden of the Lord in the wilderness, where the worship of God has been begun, schools opened, the slave trade suppressed, and the faith of the natives won."

Four of these graduates are practitioners in India: Bombay, Calcutta, Lucknow, and Madras.

A philanthropic citizen of Bombay has collected £26,975, and has the promise of £13,504, for the purpose of founding a hospital for women and children, the expenses of conducting the same, and to pay the salaries of one or two lady physicians. A large and influential committee, representing every section of the community, was organized for the purpose of promoting the object in view. This committee have invited Miss Edith Pechey, M. D., a graduate of Berne, but registered in London, to enter upon practice in Bombay, and to take charge of the Hospital for Women and Children, "with a liberal salary and excellent residence." The corner-stone of the hospital was laid with great éclat, by H. R. H. the Duke of Connaught.

"While a majority of the Calcutta Medical College consider that the requirements of the country point rather to the provision of educated midwives and nurses than to full-blown lady doctors, the government of Bengal has assumed the responsibility, and thrown open the medical college and hospital to females. One young lady, B. A. of the Calcutta University, is now enrolled as a regular student.

"In Madras, lady students were admitted to the medical college in 1875 under special rules." One of these ladies was Mrs. Scarlieb, who obtained the "M. B. Lond." of the London University, and its gold medal, in 1882. It is now proposed to place her at the head of a hospital for women and children in Madras.

"Women in India have obtained liberty and encouragement to qualify themselves, under the same circumstances and advantages as men, for the practice of the profession of medicine, and the state is prepared to sanction their doing so."

The editor of the *Journal of the American Medical Association*, after reading such comments and such able editorials on this subject as appear in that country itself, writes: "We are suddenly, but satisfactorily, awakened to the fact that perhaps we are as green in our knowledge of that country as a Hatch or a Villiard Englishman is of this."

"The Woman's Foreign Missionary Society of the M. E. Church" has voted to raise $25,000 for the establishment of the first woman's periodical in India. David C. Cook, of Chicago, has given a $2,200 Cottrell steam printing press to the *American Mission Press* in India. This will be the first steam printing machine, except those of the government, in use in India.

Sir John Lawrence, who entered the lowest class of the English Civil Service in India in 1830, and rose through all its gradations to be Viceroy in 1863, said: "I believe, notwithstanding all that the English people have done to benefit India, missionaries have done more than all other agencies combined."

BURMAH.

Rev. E. P. Dunlap, of Siam, when urging an increase of the number of medical missionaries, wrote: "Even while the heathen, through prejudice, stand aloof from the preacher, they will seek the physician more and more after he has performed some of those cures which, to them, seem almost supernatural."

There are but two women medical missionaries

in all British Burmah, both under the Woman's Baptist Foreign Missionary Society. Mrs. Douglass, M. D., in Rangoon, who is turning her medical work to good account as a means of access to the people. "Oh! for workers among the Burmans. There is an eagerness to hear the living word among the dwellers in the jungles."

In Maulmain, Dr. Ellen E. Mitchell has been assisted by a native Christian, Dr. Shaw Loo, who has greatly relieved her in some departments, and reached families, both as a physician and as an evangelist, in a way which she could not. Her patients were from eight different nations or tribes, with almost every disease that could be mentioned, though fevers, ophthalmia, coughs, rheumatism, diarrhœa, dysentery, and various skin diseases, were the most common complaints. Nearly the whole work has been gratuitous. Medicine has done much towards opening doors otherwise closed to us.

CHINA.

The portion of the great empire of China into which women medical missionaries have been sent, lies along the eastern coast at intervals from 23° to 41° north latitude. Peking, the capital, being 40°, and in but 10° of its 40° of longitude.

We are not aware of any regular system of medicine in China. Medical knowledge is rather an heir-loom. Knowledge of the virtue of certain remedies is handed down from sire to son and maintained a secret; thus producing specialists in the use of herbs, skins of reptiles, charms, amulets, superstitious and idolatrous practices. Regular medical education is unknown, yet every scholarly man is more or less a physician. The Chinese know nothing of hygiene. Filth and vermin encompass them as with a garment.

The London Missionary Society sent Robert Morrison, a practicing physician, to China in 1805. In 1829, Dr. College was stationed at Macao. The Scotchman Dr. James Henderson's medical work in Shanghai, is one of the most interesting on record. The American Board of Foreign Missions appointed the Rev. Peter Parker, M. D., a medical missionary in 1834. He opened an ophthalmic hospital in Canton, which was the forerunner of all subsequent hospitals.

In 1844, the Presbyterians founded a mission in Ningpoo, with Dr. D. Bethune McCartee, of this State, as medical missionary, who remained in China until 1872. He then removed to Japan for some years, and now has returned to this country. Dr. McCartee wrote me that he had never heard of a case of scarlet fever or diphtheria during his residence in China. He had never been called to more than four or five obstetrical cases in all that time. He had sent preparations of ergot in cases of flooding, and only prescribed in women's diseases at second hand.

Restraint, "chains and cells in the houses of relatives," was the only treatment for the insane he had ever heard of.

The mortality of parturient women was large. "A female physician would, of course, have a great advantage among those of her own sex in China, over a male physician."

Another Presbyterian mission was established in Canton in 1854, with John G. Kerr as medical missionary. Owing to the peculiar social customs of the Chinese, and their views of propriety, men medical missionaries have done nothing comparatively for suffering women. Woman's medical work was begun in Pekin in 1873 by Dr. S. Combs, sent by the Philadelphia Branch of the Woman's Foreign Missionary Society of the M. E. Church. Dr. Combs prosecuted her work in the midst of great difficulties, but with much success in winning the hearts of the Chinese women. During the first year, she prescribed for 374 cases, and 37 were treated in their own homes. In closing her report, she says: "I have treated with general success a sufficient number of cases to make me feel that the work is well begun."

A hospital building was completed in 1875, by which time she was able to do without an interpreter. In the annual report of 1876, I find, "the medical work in charge of Miss Combs, M. D., is eminently successful. She is kept exceedingly busy with out-door, as well as hospital practice." "Many would have been discouraged by the difficulties to be overcome in establishing medical work, but Miss Combs' love of her profession, her untiring zeal and her unwavering faith, have carried her triumphantly through the pioneer years of a medical missionary." "Medical work has won its way through her quick, persistent methods in this old heathen capital." "After nearly five years of efficient service, she moved to Kiukiang."

Dr. Combs was followed by Miss L. Howard, M. D., a graduate of Michigan University. She took charge of the hospital in July, 1877. In May, 1878, Dr. Howard wrote: "From July, 1877, to March, 1878, during these months dispensary patients numbered 1612, out-door patients 50, and 10 have occupied the wards. Among the outpatients I have found many in a very destitute condition, having neither food, fire, nor clothing." —"The people invariably treat me with respect, and seem grateful for the smallest favors."—

"About this time famine prevailed throughout North China, when many thousand natives died; pestilence followed."—"A number of missionaries were seized with the malignant fevers, and died." Dr. Howard wrote: "There has been a great deal of sickness among the missionaries, and for a time I was the only physician in Peking. I did not fear the contagion, though it was terrible. We could hardly go on the streets without seeing the dead and dying, lying just where they happened to fall."—"The last three months have brought sad days to the North China mission." The report said, "Dr. Howard's courage never failed her in all these days of trial, when death was on every side, but her physical powers were greatly taxed." She reported "2015 day patients, 80 out-door patients, and 18 having occupied the wards for the entire year."

In the fall of 1878, medical work was suspended in Peking, by Dr. Howard being called to Tientsin, the seaport of the province, eighty miles distant by land and one hundred and twenty miles by water.

The way for this change was brought about by providential circumstances beyond her control. When Gen. Grant and his party were visiting in Tientsin, in June, 1878, they were entertained several times by the Viceroy, Li Hung Chang, the Governor-General of the province, next in authority to the Emperor, and the leading statesman in the Empire. His wife, Lady Li, gave an evening entertainment to the wives of the resident officials. A lady of the mission accompanied Mrs. Grant as interpreter. When a few weeks later Lady Li was very ill and given up to die by the native doctors, the Viceroy, being in sore distress at the prospect of losing his wife, in opposition to the prejudices and principles of the Chinese, yielded to the persuasions of the United States Consul (who was the private secretary of the Viceroy), and sent for the foreign physician of the city and the medical missionary of the London Missionary Society. These carried Lady Li safely through the immediate peril, but they, as men physicians, could not diagnose the case of a lady patient. Both doctors united in petitioning the Viceroy to send for Dr. Howard, and the possibility of saving his wife enabled him to set at naught all Chinese ceremonies. A courier was dispatched with a request to Dr. Howard to come, and a steam launch sent to meet her to hasten her arrival. Happily, the disease of Lady Li yielded to the medication of Dr. Howard; and soon Lady Li learned not only to appreciate Dr. Howard's medical skill, but to feel for her a tender regard. Strong inducements were held out to persuade Dr. Howard to remain in Tientsin. Apartments were fitted up in one of the temples of the city for a dispensary by the Viceroy, and Lady Li became responsible for its support.

Miss Howard's associate wrote: "We know not how much this is for China, but it looks like a big wedge in very near the throne."

Dr. Howard wrote, March 21, 1879: "I commenced work in the dispensary about the middle of October, 1878. Up to the present time, I have treated 310 patients in the temple, and visited 120 patients in their homes."—"I live about three miles from the temple, in the foreign settlement, where I have treated over 1,000 patients and have visited seventeen patients in their houses. We consider this the most important part of our work."—"I am called to the houses of the highest officials; their prejudices are breaking down everywhere over the land."—"Patients come from the interior and take up their residence near the temple, that they may be treated."

Rev. H. H. Lowery wrote: "The importance of the present opening can scarcely be overestimated. Dr. Howard's attendance upon the Viceroy's wife has made an opportunity such as never occurred in China before, and if lost now, may never occur again. The homes of many of the best and most influential of the city are open to the visits of your physician."

Dr. Aker was sent to Dr. Howard's assistance in 1882. In the annual report for 1883 were found the following numbers:

Of patients in wards	92
Of out-door patients	903
Of Missionary Dispensary	8,338
Perscriptions given	29,657

FOOCHOW.

In October, 1874, Miss Sigourney Trask, M. D., of Spring Creek, Pa., a graduate of "The Woman's Medical College in Philadelphia," was sent to Foochow by the New York branch of the Woman's Foreign Missionary Society of the M. E. Church. The number of patients treated the first year was 554, and 36 surgical operations. In April, 1877, a commodious, well-arranged hospital was ready for use. The first patient registered in it was a woman of 28 years, who had not walked erect for five years, on account of an injury to her knee. This resulted in anchylosis, with flexion at nearly a right angle. Dr. Trask made a resection, the limb was straightened, a good recovery made, and in three months the woman returned to her home, 60 miles from Foochow.

A little girl of 15 years had both legs ampu-

tated below the knees successfully. The mother of this girl's betrothed husband was greatly disturbed by her recovery.

A pretty, bright young woman with bound feet, having a terribly ulcerated leg, was improving so that Dr. Trask hoped amputation would not be necessary.

A large tumor having been removed from the back of a woman, her husband said: "I had made offerings to many gods, but all to no good for my wife."

Concerning another who had her right arm amputated, Dr. Trask said, "I have but little hope for her."—"I do not think her friends will mourn very much, but rather rejoice."

In 1873, Dr. Trask wrote, "We have had almost 20,000 deaths of natives here in two weeks from cholera. It is a most malignant type."—"During the last quarter I have had 267 dispensary patients, and over 500 prescriptions have been made." The whole number of out-patients registered since 1877 is 1,206. Number of patients admitted into the wards of the hospital was 76.

In 1878, Dr. Julia A. Sparr, a graduate of Michigan University, was sent to reinforce Dr. Trask. Seven years ago Dr. Trask received, under instruction, the first female medical student in Foochow—the first ever in China. Since then five others have been received—six now being under instruction. Letters have been received by the society, asking that at least one of these, Hu Keng Eng, of whose ability, aspirations, and devotion, Dr. Trask speaks in the highest terms, should be brought to this country to remain ten years, if necessary, in order that she may go back qualified to lift the womanhood of China to a higher plane, and there to superintend our medical work; and this young student herself sends an earnest petition to be brought to America. "Shades of conservatism and Confucianism!"

Dr. Catherine Cory was added to the medical staff in Foochow in 1883.

In the annual report of the mission for 1883, I learn that woman's medical work grows steadily in interest and favor in Tientsin, as seen in the following table:

	Patients.	*Surgical Operations.*	*Deaths.*
Hospital Dispensary . . .	1,051	66	—
East Street " . . .	1,644	134	—
Bedside	262	60	—
House	58	26	2
	3,015	286	2

We gather from the annual report of 1883 of the Presbyterian Board of Foreign Missions, that in Canton "another hopeful feature here is that it is reaching the women."—"Three women from the school have commenced Christian work, and one has entered upon the study of medicine."—"The hospital work, under Dr. John G. Kerr, has been greatly prospered. He has had 19,199 out-patients, 1,182 in-patients, and has performed 963 surgical operations. During a part of the year, Miss Mary E. Niles, M. D., of the Nankin Mission, was under his special instruction. Miss Butler is studying medicine, and several natives also have formed a class."

You will remember, Dr. Kerr went to Canton in 1854. Almost a generation has passed before "reaching the women." We are happy to know that the men medical missionaries have welcomed cordially the women physicians to their stations. But I have not noticed any other doctor than Dr. Kerr taking a newly-arrived woman medical missionary under his "special inspection."

We learned upon inquiry of a member of the Baptist Mission in Swatow, nearly in the same latitude, but a little east of Canton, as to the freqency of infanticide, that she had known:

100 mothers who had destroyed 158 female children.

40 mothers who had destroyed 78 female children.

6 mothers who had destroyed 11 female children.

When the mother does not strangle or smother her child by holding a cloth over its face, or by filling its nostrils and mouth with cotton saturated with incense, the child is wrapped in matting and carried by the father and thrown into the river, or into the little window of a walled pit prepared for the reception of female children, where lime is thrown over them. No one asks how the child came to its death. Boys are never destroyed. "A husband reviles or hates his wife if she does not bear sons, and may be legally divorced."

Miss Carrie Daniels, M. D., was sent to Swatow by the Woman's Baptist Foreign Missionary Society recently, and is laying the foundation for woman's medical work.

Dr. Virginia C. Murdock, a graduate of Michigan University, under the auspices of "The American Board of Commissioners for Foreign Missions," in Kalgan, on the mountains, answered my questions fully, but her letter was received too late to allow of more than a few quotations. She says infanticide "is not practiced to any extent." The death of sons is a sore affliction, that of

daughters a good riddance. Small-pox is considered a regular disease of childhood. A son who has not been vaccinated is not counted as having a lease of life that can be depended on. None would think of having a girl vaccinated. If a cherished son is sick, a doctor is called, but with girls, it is the "survival of the fittest." Cholera infantum is very frequent and fatal. If a mother cannot nurse her child, a wet-nurse is hired. No other way to raise children is attempted. People do not seem to have the patience to care for their sick babies. Burial of the dead is general, but dead female children are often wrapped in a mat and thrown into the street at night, so that dogs may tear them to pieces, hoping that thus their little spirits will be liberated and come back to the parents as sons.

Chinese midwives are quite efficient ordinarily, but in unusual presentations and flooding their arts are at an end. Forceps are not permitted to be used in that locality. Dr. Murdock had been called in a case of post-partum hemorrhage, when she found the woman fainting, but held up by the hair of the head, it being dragged upward by the husband and brother taking turns as they became fatigued. No advice or inducement could be made to them to let go of her hair and allow her to lie down for an hour or two. She lived through it, but, as they thought, only because they adhered to their well-known theories.

A lying-in woman must not leave the house for forty days after her delivery, and must live on slop food all the time. Amenorrhœa was the most frequent disturbance of the menstrual function. Coughs, bronchial and asthmatic, with shortness of breath, very frequent. Dyspepsia universal. "Worms! worms! to be treated for round worms is everybody's fate." Skin diseases and ulcers of various sorts are common. Rheumatism, acute and chronic, not as frequent as might be expected, as the natives wear cotton hose and cotton shoes the whole year, and as their houses have brick floors.

Thirty-six women medical missionaries have been graduated, as follows:

In the Woman's Medical College of Chicago	4
" Michigan University	5
" Woman's Medical College of the New York Infirmary	6
" Woman's Medical College of Penna.	20
Homœpathic	1

The W. F. M. S. of the M. E. Church have sent to India 7; to China 10; to Japan 2.

The W. F. M. S. of the Presbyterian Church have sent to India 2; to China 3.

The W. F. M. S. of the American Board of Commissioners of Foreign Missions have sent to India 2; to China 1.

The W. F. M. S. of the Baptist Church have sent to Burmah 2; to China 1.

The W. F. M. S. of the Lutheran Church have sent to Burmah 1.

There are 8 graduates of the Woman's Medical College of Pennsylvania under appointment:

One for Damascus, by the Episcopal Church.

Five for China: 1 by the Episcopal Board, 1 by the Methodist Church South, 1 by the Baptist Church South, and 2 by the Presbyterian Board.

One not determined whether India or China, and one not determined whether Burmah or China.

There are 8 under-graduate missionaries in the class in the Woman's Medical College of Pennsylvania.

As business men judge of the plausibility of a projected scheme by the amount of money that can be raised for its advancement, I thought it might be satisfactory to know what amount these Woman's Foreign Missionary Societies have collected during 1883. I have had access to the treasurers' reports of but four societies, from which I copy the following:

Woman's Baptist Foreign Missionary Society for 1883	$23,546.70
Woman's Foreign Missionary Union for 1883	53,831.64
Woman's Foreign Missionary Society of the M. E. Church	167,037.50
Woman's Foreign Missionary Society of the Presbyterian Church	169,587.86

Joseph Cook, who has a most comprehensive knowledge of the subject of missions, tells us, "There are three hundred millions of women now on this planet who have only the Buddhist's hope of being born again as men, instead of toads or snakes. There are eighty millions of women in Moslem harems. There are uncounted millions of men, women and children growing up in the most degraded superstitions, and suffering in mind, body, and estate from inherited pagan customs." —"What can be done to help these millions?"— "In China there is not an ordained missionary to-day for a million of people."

In view of these almost stupendous numbers, the work of these Women's Foreign Missionary Societies is but as "playing at missions," and the work of women physicians in Asia as "throwing one pebble into the great ocean of missionary work."

—Doctor—"There, get that prescription filled, and take a tablespoonful three times a day before meals." Pauper patient—"But, doctor, I don't get but one meal in two days."—*Texas Siftings.*

THE TIME REQUIRED BY THE BLOOD FOR MAKING ONE COMPLETE CIRCUIT OF THE BODY.*

BY ROBERT MEADE SMITH, M. D.,
Professor of Comparative Physiology, University of Pennsylvania.

In a paper published in the *Philadelphia Medical Times* for January 26, 1884, I gave an account of a new method which I had employed to measure the amount of blood thrown out of the ventricles at each contraction, and to determine the time required by the blood for making one complete circuit of the body. I there had occasion to criticise the method which has heretofore been employed to answer this latter question, and to point out some of its defects. I have recently been studying this subject from another point of view, and have obtained some results which strengthen the position taken in the article referred to.

It will be remembered that the method which has been employed for this purpose, the infusion method of Hering (*Zeitschrift. für Phys.*, Bd. iii. and v., and *Arch. für Phys. Heilkunde*, 1853, p. 112), consists in injecting into one jugular vein towards the heart a solution of some salt whose presence in the blood can be readily recognized by chemical tests, and in finding how soon after the injection the salt appears in the blood coming from the head in the corresponding vein on the opposite side of the neck.

When thus injected, to reach the peripheral portion of the opposite jugular vein, the salt must evidently have passed into the right heart, through the capillaries of the lungs, into the left heart, through the carotids or vertebral arteries to the head, and through the capillaries of the head or face to the jugular vein; or, in other words, must have passed through two capillary networks with their arteries and veins. It must, therefore, have completed an entire circulatory revolution. But to conclude that the time elapsing after the introduction of the salt into one jugular vein before it is found in the blood coming from the head in the opposite vein is the time required for one molecule of blood to pass from one of these points to the other, it must in the first place be admitted that the salt has been carried mechanically by the blood, without diffusing through it, with the same velocity as the blood itself; and in the second place, to enable the formation of any opinion as to how often the entire mass of blood passes through the heart, it must be admitted that the velocity thus determined by the infusion method is the mean velocity of the blood mass. To show that both of these assumptions are unwarrantable is the object of the present communication.

I. *The Element of Diffusion in Hering's Method.*—Poisseuille (*Ann. d. Sciences Nat.*, 1843, ii. ser. t. xix., p. 30) was the first, and as far as I know has been the only one to offer any experimental proof as to the falsity of the belief that the potassium salt was carried mechanically, as would be an inert body, by the blood. He repeated Hering's experiments on the horse, and was able to confirm his statement as to the time elapsing after the injection of the solution of potassium ferrocyanide before it appeared in the jugular vein of the opposite side; but he further found that this time was different for different substances, and was even modified by the presence of other substances when injected with the potassium ferrocyanide. Thus, while the time required for the circulation of the potassium ferrocyanide was *twenty-eight* seconds in the horse, when a little alcohol, in quantity insufficient to have any appreciable effect on the pulse and blood pressure as measured with the hæmadynamometer, was injected with the potash salt, the time of circulation was lengthened to *forty-five* seconds. Or, when potassium nitrate or ammonium acetate was administered under similar circumstances, the duration of circulation was reduced to *eighteen* or *twenty* seconds. In other words, he found that in the living body the rapidity of circulation of substances mixed with the blood agreed with the rapidity of flow of the same substances through dead capillaries or even through glass tubes.

It is, moreover, well known that if two fluids capable of mixing are brought into contact, they will diffuse into each other with a considerable degree of rapidity, even when the mass of the liquid is at rest, or when there is a great difference in the relative volumes of the fluids; while if one fluid is poured into another with which it is miscible, or if agitated after the two fluids are brought into contact, diffusion is almost instantaneous. And as some force is always employed in injecting the salt solution into the vein, the mixture of this solution with the blood will be promoted, while the motion of the blood renders the conditions still more favorable for diffusion.

The assumption is, therefore, a fair one, until subjected to experimental disproof, that the element of diffusion forms a considerable item in the rapidity with which solutions of salts complete the circuit of the body. As far as I know, however, no such proof has ever been advanced, and the direct experiments which I have made on this

*Read before the College of Physicians of Philadelphia.

subject serve rather to confirm than to disprove this assumption.

It is evident that if any particulate, inert substance, small enough to pass through the capillary networks, and capable of ready recognition, could be injected into the blood, there could be no question as to the element of diffusion in the time required for such a substance to complete the circuit of the body; its velocity of movement must be the velocity of the current in which it moves; and if more time is required for the circulation of such a body than for the salt solution, it will be evident that some force other than the propulsion of the blood is concerned in the movement of the salt. These conditions I believe to be filled in employing pigeon's blood as the body whose transit is measured.

The red blood corpuscles of the pigeon have a short diameter smaller than the diameter of mammalian blood disks; and as all red blood corpuscles pass edgewise, and oval corpuscles (as in the frog) pass endwise in the centre of the blood stream, it is probable that the pigeon's corpuscles will circulate in mammalian blood-vessels with their long diameter in the axis of most rapid movement. They therefore agree with the first requisite as to size.

In the second place, they are oval and nucleated, and so form such a strong contrast to mammalian blood disks that a single pigeon's corpuscle in a drop of mammalian blood can be found under the microscope with the greatest readiness.

It might at first be seen, however, that pigeon's blood injected into the vessels of a mammal is by no means an inert substance. It was proved in the earlier operations of transfusion that the blood of one species of animal is a direct poison for other species. When the blood, whether defibrinated or not, of one group of mammals is injected into the vessels of another of the same class, but of different species, the corpuscles of the injected blood rapidly disappear, the plasma becoming red from the liberated hæmoglobin, which, when large quantities of blood are injected, may pass off through the kidneys, causing hæmoglobinuria, or even into the mucous and serous secretions; while at the same time the corpuscles of the animal reciving the injection, if they are themselves soluble in the injected blood, break down, and, as a consequence, convulsions and death through asphyxia may result.

The resistance offered to these phenomena differs in different groups of animals; thus, the dog, of all animals, is least liable to dangerous symptoms following the injection of blood from a different species. There is still another complication to be noted. Before the corpuscles are dissolved they tend to run together into heaps and so cause emboli, while again the liberation of hæmoglobin is likely to cause thrombosis.

It would seem from the above that pigeon's blood, which was also found by Bischoff to provoke analogous symptoms when injected into mammals, is by no means an inert substance, and is therefore entirely unfitted for the use I have made of it. Such is not, however, the case. The production of the symptoms mentioned above is a question of minutes; the duration of the circulation one of seconds; and I have found by direct experiment, as will be shown later, that the circulation is completed before disorganization commences.

There is one difficulty, however, that must be guarded against. The solution of the pigeon's corpuscles occurs not only in the vessels of the dog, the animal on which most of my experiments were made, but also after blood had been drawn and exposed to the air. Therefore, if the corpuscles are not sought for within a very short time after the withdrawal of the blood, they will only be found with great difficulty, and sometimes not at all, though it may be that their presence in the same portion of blood was proved only a few minutes before. To avoid error from this cause, Dr. Gray, the Assistant Demonstrator of Histology in the University, kindly examined the blood for me the instant that the collection was made, and before alteration had commenced. Such a procedure is not, however, absolutely necessary, as the first change in the corpuscles is their loss of hæmoglobin and consequent transparency, while the cell wall disappears still later, and the nucleus remains unchanged for some time. If, therefore, a little aniline red is added to the drop of blood under examination, pigeon's corpuscles, otherwise almost invisible, can be readily recognized.

Method of Experiment.—Two pigeons were killed by decapitation immediately before the experiment, and their blood collected in a dry porcelain dish and thoroughly defibrinated by whipping with glass rods; the blood was then filtered through a fine linen cloth moistened with half per cent. salt solution (water was avoided so as to preserve corpuscles unaltered).

The animal to be experimented on was then tied and etherized, and glass canulæ, of the same calibre as the vessels, were inserted into the external jugular veins, in the left directed towards the heart, and in the right towards the periphery, the flow of blood being prevented by spring clips.

A canula was then inserted into the femoral artery, and connected with a mercurial manometer writing on the kymographion.

The canula in the right external jugular vein was connected by means of a piece of rubber tubing about 4 centimeters long with a glass stopcock by which the outflow of blood could be regulated to about the amount normally passing through the vein.

The apparatus for collecting the blood and for noting the time of each collection consisted of a horizontal glass disk 31 centimeters in diameter, which could be uniformly rotated by clock-work at any desired speed. Twenty-four watch-glasses, each about two cm. in diameter, were fastened by sealing-wax around the edge of the disk, and the apparatus was so arranged that as the disk rotated, the centre of each watch-glass passed under the stopcock connected with the right jugular vein.

The time was recorded in the following way: The entire disk, with the exception of the border on which the glasses were fastened, was covered with a layer of lampblack, and an electro-magnetic lever so arranged that as the disk revolved it would describe a concentric circle on the smoked surface. This electro-magnet, with a similar lever writing on the drum of the kymographion, was included in an electric circuit broken every second by a second's pendulum. Each interruption of the circuit, therefore, made a mark simultaneously on the revolving disk and on the moving paper of the kymographion. The apparatus was further so arranged that a single movement started the revolving disk, and at the same time made a mark on the already revolving drum of the kymographion. The orifice of outflow from the stopcock, and the time lever, were on the same radius of the disk.

A syringe containing 10 c c. was then filled with the defibrinated pigeon's blood and bound in the canula, previously filled with the same blood, in the left external jugular. After all connections were made, the kymographion was started and allowed to revolve for twenty or thirty seconds before making the injection, so as to get a normal pulse and pressure curve. The clip was then removed from the right jugular vein, and as soon as the blood commenced to flow from the glass stopcock, the clip was removed from the left jugular, the injection made, and the disk started simultaneously—the instant of starting the disk being also automatically recorded below the pulse line on the kymographion.

When all the cups were filled with blood the disk was stopped, and the blood instantly examined microscopically for the presence of pigeon's corpuscles. When it was determined in which glass they first appeared, it was only necessary to count the number of breaks in the time line on the disk from this glass to the start to determine how many seconds were required for the pigeon's corpuscles to pass from the left jugular vein to the right—while by laying off on the kymographion tracing the same number of seconds from the starting of the disk, the number of pulsations in that period was readily determined, and also whether the injection produced any disturbance of circulation.

(*To be Continued.*)

REPORT OF A CASE OF SUCCESSFUL REMOVAL OF THE SPLEEN IN A DOG.*

BY DR. W. J. ASDALE,
Of Pittsburgh, Pa.

To those interested in cases of removal of the spleen, the following case might prove of interest:

In June, 1875, Dr. W. J. Asdale, assisted by Dr. J. J. Todd (since deceased) and Mr. C. J. O'Brien, then a medical student and now a practicing attorney in Pittsburgh, removed the spleen from a one-year-old black poodle dog, weight estimated at fifteen pounds. The animal being put under the influence of ether, an incision three inches in length was made in the median line over the epigastric region; by pressing aside the stomach and intestines, the spleen was easily brought into view. It was removed entire, by detaching it gently from the surrounding parts, leaving only a narrow pedicle, which was then pierced in the centre and silk ligatures thrown around both halves. The pedicle was then severed, and the ligatures cut off short and allowed to remain in the wound. The parts were then thoroughly cleansed, and the abdominal incision closed with six silver sutures. The dog was then permitted to care for himself, being supplied with a very limited quantity of milk. In two weeks, the edges of the wound having united perfectly, the silver sutures were removed. This dog remained around Dr. Asdale's house as a house-pet for nine years. He died in January, 1884. In this case the operation did not seem to change his disposition; he remained good-natured and thrifty. He developed rapidly, his weight at the time of his death being estimated at from twenty-five to thirty pounds. He was a good, active watch-dog, a good

*Reported by Wm. H. Mercur, M. D., Resident Physician West Pennsylvania Hospital, Pittsburgh, Pa.

feeder, never morose or sullen. The greater part of the time he was well nourished; his skin was clean, and his hair smooth and glossy.

He died suddenly, after being exposed to severe cold. The post-mortem, at which I was present, was made a few hours after death. The body was in good condition, and not emaciated. The only pathological lesion found was a severe enteritis affecting the lower part of the small intestines, from which, in all probability, the dog died. His lungs, heart, kidneys, and all his other organs, were perfectly normal. There was not the slightest trace of the spleen, nothing to denote its former locality, no remains of a pedicle, nor anything to show that nature had made the slightest attempt at restitution; its origin was entirely obliterated.

Hospital Reports.

BELLEVUE HOSPITAL, NEW YORK.

REPORTS BY J. H. WOODWARD, M. D.

House Surgeon.

Burns and Scalds.

In this report I propose to consider the subject of the management of burns and scalds. They are always injuries which subject the patient to considerable pain, and not infrequently they are severe enough to endanger his life. If they be managed according to certain methods, not only do they become cases which are disgusting to the attendants, but they are rendered still more dangerous to the patient. There are other methods of treatment, however, which remove the disagreeable features referred to, and which, above all, diminish the danger to life and hasten the healing process. It will be the object of this article to describe, as briefly as possible, the management of these cases as it is followed in this institution at the present time.

Burns were classified by Dupuytren according to the depth of the lesion, and he divided them into cases presenting six degrees of severity. In burns of the first degree, there is only inflammation of the skin. In cases of the second degree, the epidermis is detached and blebs of various sizes are formed. In burns of the third degree, the cuticle and a portion only of the true skin are destroyed. In cases of the fourth degree, the lesion extends through the true skin. And in cases of the fifth and sixth degrees, the burn involves muscles, tendons, nerve-trunks, blood-vessels, and bones.

The cases most frequently met in this institution may be classified under the second and third divisions. Burns of the first and fourth degrees are seen occasionally. Cases of burns extending to the fifth and sixth degrees have not entered this institution during the past two years. And for the reason that such cases have not been treated here during your reporter's residence in the hospital, the following remarks must not be regarded as relating to such cases.

The constitutional symptoms present in any case will depend upon the power of endurance of the patient and, speaking generally, upon the extent of surface burned. Pain is a constant symptom, and seems to be most intense in cases of the second degree. There is generally some shock at the outset, and it seems to be prolonged by the pain. As a rule, the quantity of urine excreted is diminished from the outset. In many cases during the first week or two, that may become a very serious symptom. In a considerable number of cases, albumen may be found in the urine after the first twenty-four hours, and, in some cases, blood may also be found there. During the first week the temperature may be elevated to 100°–101°. In more serious cases, the temperature will range from 100° to 103° for five or six days. The heart generally requires stimulation. The patient will emaciate very rapidly, even when the burn appears to be of moderate severity only.

When the burn affects a large area of skin, whether it be of the first, second, or of any degree, the prognosis must be very guarded. The presence of albumen or blood, or both, in the urine should be regarded as a grave symptom. Of all the cases of death from burns that have come under my observation, a certain number have died of shock within forty-eight hours. But a larger number have perished at a later period. Those cases have perished after presenting the following symptoms: the urine was diminished very much in quantity and generally contained albumen. The skin was dry and the bowels constipated. The patient became delirious, and after several days he became stupid. The pulse was rapid and feeble. The temperature was above 100° for several days, and, within twenty-four hours of the patient's death, began to rise until some of these cases died with a temperature of 108°. There was failure of the peripheral circulation in the extremities a number of hours before death.

Only one case presented any symptoms of duodenal trouble. And but one instance of ulceration in the duodenum has been found in the autopsy room. That case was one of "frost-bite" of the fingers of both hands.

Having briefly referred to a number of the most important symptoms, we will consider the constitutional treatment. For the pain, morphine should be given hypodermically in sufficient amount to make the patient comfortable. And tr. digitalis or whisky may be given hypodermically for the feeble heart-action during the period of shock. As soon as the patient has rallied and can take substances by the mouth, he is given inf. digitalis, ℥j.; potassii acetatis, gr. xv., every three hours night and day. He is put upon a milk diet exclusively. Under that course of treatment, the patients do better than if they are not managed with the object of relieving the kidneys. As soon as the patient is strong enough, a cathartic is administered. And should any suspicion of uræmic poisoning become justifiable, diaphoretics are added to the list of drugs. In one such case I have administered nitrate of pilocarpine, hypodermically, in sufficient amount to excite the action of the skin. The patient improved very markedly after that drug had been administered.

The temperature seldom requires treatment. Although the fever will continue for a number of days, and, although the patient is in poor condition to endure a high temperature, the experience of this hospital seems to be in favor of permitting the fever to run its own course. Antipyretic doses of quinine and cold baths injure a certain number of these patients much more than the febrile movement. Should the temperature begin to rise after remaining pretty steadily about 102 for a number of days, in many cases it would be better to attempt to establish the peripheral circulation in the extremities than to give quinine or a bath. In such cases, the temperature may rise because the circulation is poor in the skin. If such be the case, it is ruinous to give large doses of quinine. Turpentine stupes or flaxseed and mustard poultices applied to the feet fulfil the indications pretty well. For all temperatures in cases of burns it is good practice to avoid the use of all antipyretic agents. In the majority of cases good tonic treatment should be begun early.

For the treatment of the burn itself there are two very popular remedies. They are carron oil and vaseline. But they should be discarded entirely in these cases. Under their use there is profuse suppuration, the room is filled with an odor that is very disgusting, the dressing must be renewed frequently, and the lesion does not heal rapidly. Iodoform ointment (ʒj. to ℥j.) is used in hospital practice often enough, but it is unsuited to the requirements of private work. The odor of the drug is not the sole objection to its use in these cases, however; for it is not difficult to poison the patient with iodoform, when the ointment is applied to deep or extensive burns. A number of cases of such poisoning have occurred in this hospital; but there have been no fatal results thus far.

The requisites of a satisfactory dressing for cases of burns may be enumerated as follows: It should be comfortable to the patient, diminish secretion from the affected part, require to be renewed only at long intervals, and it should promote healing. A large variety of dressings have been tried here, and now the general opinion is fixed upon certain methods, which will be given as briefly as possible.

Suppose that the lesion is one of the second degree. The affected region is covered with blebs of various sizes. These blebs are cut open with a scissors and evacuated. The detached epidermis is cut away carefully. Leaving the epidermis in situ after evacuation of the blebs does not seem to offer any advantages, and sometimes such practice retards the healing process. While these manipulations are in progress, the affected member should be irrigated with some antiseptic solution. Bichloride of mercury dissolved in water (1-2000) has been used here very extensively for this purpose. It is too corrosive in that strength, and causes many patients to suffer indescribable agony. I have seen a patient in convulsions on account of the pain, in spite of large hypodermics of Magendie's solution. There are many patients, however, who will not complain of the corrosive mercury. Used upon extensive burned surfaces, carbolic solutions may give rise to poisoning, which should, of course, be avoided in such cases above all others. And, furthermore, they are irritant, and give rise to a large secretion of serum. Turscheé's antiseptic fluid, which contains boracic acid five parts,, salicylic acid one part, to water five hundred parts, is not very irritant, and is perfectly effective. It is the best solution for this use. The burned surface is irrigated with that solution and washed gently with sponges. Having thoroughly cleansed and having rendered the burned region as aseptic as possible, we dust upon it a layer of subnitrate of bismuth thick enough to thoroughly protect the part. On this four or five thicknesses of carbolized or bichloride gauze should be wrapped gently. Over all some antiseptic cotton is placed in a thick layer, and bound on gently with a bandage. This dressing will remain perfectly sweet for a week or two. Should serum come through it after a day or two, we cover the discharge with more cotton and a bandage. The part is examined after a week or two, according to the size of the burned district. Usually at the end of one week the burn is examined and found healed throughout. Should a second or a third dressing be required, it is applied under the same rules as the first. It is possible to cite a large number of such cases, and give the details of their management, but it seems to me unnecessary to do so.

Burns of the second degree about the face are very satisfactorily treated with a saturated solution of bicarbonate of soda in water. That is applied by making a mask of sheet-lint for the burned district, which mask is kept constantly wet with the solution. The blebs and epidermis are treated in these cases as in the others. Bismuth powder answers the purpose here very well indeed.

Burns of the third and fourth degrees require another sort of dressing. In these cases the bismuth dressing will become very foul smelling after three or four days. The discharge is much greater than in the former set of cases, and the bismuth salt is not antiseptic, so that the discharges are apt to undergo putrefaction, unless the dressing is renewed every second or third day. Cases of burns of the third and fourth degrees, if extensive, present a great variety of difficulties, and they often require a great deal of skill and patience on the part of the physician for their proper management. It is but to render them aseptic at the onset and to keep them so until they have healed. The Tiersch antiseptic fluid is efficient, and should be chosen for irrigating and washing the parts. The burn should be cleansed thoroughly of sloughs and other dead tissue. Then the dressing may be applied, and it should be of such a nature that it may remain undisturbed for a week or two. Boracic acid crystals may be powdered upon the lesion; or boracic ointment (ʒj. to ℥j.) may be used spread upon antiseptic gauze. If boracic acid crystals are selected, then the lesion is thickly covered with them. Disinfected rubber tissue should then be applied in strips over the acid, and the antiseptic gauze and cotton dressing applied as in cases of the second degree. Granulation is favored and promoted by this treatment, and cicatrization goes on satisfactorily. These large ulcerating surfaces should be skin-grafted as soon as the granulations are in the proper condition for it. After the grafts have been placed upon the ulcer, the boracic acid

may be dusted upon the part and the dressing made as before. Instead of boracic acid or the boracic ointment, a powder composed of equal parts of subnitrate of bismuth and iodoform may be used to accomplish the objects in view. I am inclined to think that this powder promotes healing more satisfactorily than any other dressing I have seen used in these cases. There is very little discharge, and cicatrization proceeds very rapidly.

In any case of deep and extensive burns, considerable time must elapse before healing is complete. The patient is confined to bed, and that alone is sufficient to lower his vitality. It is very necessary, therefore, that the discharges should be reduced to a minimum quantity. For the attainment of the objects in view, the closed dressings which I have described in this paper are the best that have been used in this hospital.

By the employment of them the mortality has been diminished, and the period of healing very much shortened.

Medical Societies.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(*Continued from page* 655.)

Probably amongst the palsies may be considered the disturbances of the renal functions, which are rarely met with in cerebral syphilis, and which are probably usually dependent upon the specific exudation pressing upon the vaso-motor centres in the medulla. Fournier speaks of having notes of six cases in which polyuria with its accompanient, polydipsia, was present, and details a case in which the specific growth was found in the floor of the fourth ventricle. Cases have been reported in which true saccharine diabetes has been present (Consult. Servantié, *Des rapports du Diabète et de la Syphilis.* Paris Thèse, 1876), and I can add to these an observation of my own. The symptoms, which occurred in a man of middle age with a distinct specific history, were headache, nearly complete hemiplegia, and mental failure, associated with the passage of comparatively small quantities of a urine so highly saccharine as to be really a syrup. Under the influence of the iodide of potassium the sugar in a few weeks disappeared from the urine.

Epilepsy.—Epileptic attacks are a very common symptom of meningeal syphilis, and are of great diagnostic value. The occurrence in an adult of an epileptic attack, or of an apoplectic fit, or of a hemiplegia after history of intense and protracted headache, should always excite grave suspicion.

Before I read Prof. Fournier's work on Nervous Syphilis, I taught that an epilepsy appearing after thirty years of age was rarely, if ever, essential epilepsy, and unless alcoholism, uræmic poison, or other adequate cause could be found, was in nine cases out of ten specific; and I therefore quote with satisfaction Prof. Fournier's words: "L'épilepsie vraie, ne fait jamais son premier dêbut à l'âge adulte, à l'âge mûr. Si un homme adulte, au dessus de 30, 35 à 40 ans, vient à être pris pour la premiêre fois d'une crise épileptique, et cela dans la cours d'une bonne santé apparente, il y a, je vous le répète, hui, ou neuf chances sur dix pour que cette épilepsie soit d'origine syphilitique."

Syphilitic epilepsy may occur either in the form of petit mal or of the haut mal, and in either case may take on the exact characters and sequence of phenomena which belong to the so-called idiopathic or essential epilepsy. The momentary loss of consciousness of petit mal will usually, however, be found to be associated with attacks in which, although voluntary power is suspended, memory recalls what has happened during the paroxysm; attacks, therefore, which simulate those of hysteria, and may lead to an error of diagnosis.

Even in the fully developed type of the convulsions, the aura is only rarely present. Its absence is not, however, of diagnostic value, because it is frequently not present in true essential epilepsy, and it may be pronounced in specific disease. It is said that when in an individual case the aura has once appeared, the same type or form of approach of the convulsion is thereafter rigidly adhered to. The aura is sometimes bizarre; a severe pain in the foot, a localized cramp, a peculiar sensation, indescribable and unreal in its feeling, may be the first warning of the attack.

In many, perhaps most cases of specific convulsions, instead of a paroxysm of essential epilepsy being closely simulated, the movements are in the onset or, more rarely, throughout the paroxysm, unilateral; indeed, they may be confined to one extremity. This restriction of movement has been held to be almost characteristic of syphilitic epilepsy; but it is not so. Whatever diagnostic significance such restriction of the convulsion has, is simply to indicate that the fit is due to a cortical organic lesion of some kind. Tumors, scleroses, and other organic lesions of the brain cortex, are as prone to cause unilateral or monoplegic epilepsy when they are not specific as when they are due to syphilis.

Sometimes an epilepsy, dependent upon a specific lesion implicating the brain cortex, may be replaced by a spasm which is more or less local and is not attended with any loss of consciousness. Thus, in a case now convalescent in the University Hospital, a man, aged about thirty-five, offered a history of repeated epileptic convulsions; but at the time of his entrance into the hospital, instead of epileptic attacks, there was a painful tic. The spasms, which were clonic, and occurred very many times a day—sometimes every five minutes—were very violent, and mostly confined to the left facial nerve distribution. The trigeminus was never affected, but in the severer paroxysms the left hypoglossal and spinal accessory nerves were profoundly implicated in all of their branches. Once, fatal asphyxia from recurrent laryngeal spasm of the glottis was apparently averted only by the free inhalation of the nitrite of amyl. The sole other symptom was headache, but the specific history was clear, and the effect of anti-syphilitic remedies rapid and pronounced.

Psychical Symptoms.—As already stated, apathy, somnolence, loss of memory, and general mental failure, are the most frequent and characteristic mental symptoms of meningeal syphilis; but, as will be shown in the next chapter, syphilis is able to produce almost any form of insanity, and there-

fore mania, melancholia, erotic mania, delirium of grandeur, etc., etc., may develop along with the ordinary manifestation of cerebral syphilis, or may come on during an attack which has hitherto produced only the usual symptoms. Without attempting any exhaustive citation of cases, the following may be alluded to:—

Dr. A. Erlenmeyer reports (*Die leutischen Psychosen*) a case in which an attack of violent headache and vomiting was followed by paralysis of the right arm and paresis of the left leg, with some mental depression; a little later the patient suddenly became very cheerful, and shortly afterwards manifested very distinctly delirium of grandeur with failure of memory. Dr. Batty Luke reports (*Journ. Ment. Sci.*, Jan. 1874, p. 560) a case in which with aphasia, muscular wasting, strabismus, and various palsies, there were delusions and hallucinations.

In the same journal, April, 1869, Dr. S. D. Williams reports a case in which there were paroxysmal violent attacks of frontal headache. The woman was very dirty in her habits, only ate when fed, and existed in a state of hypochondriacal melancholy.

M. Leiderdorf details a case with headache, partial hemiplegia, great psychical disturbance, irritability, change of character, marked delirium of grandeur, epileptic attacks, and finally dementia, eventually cured with iodide of potassium. (*Medizin. Jahrbücher*, xx. 1864, p. 114. Several cases illustrating different forms of insanity are reported by Dr. N. Manssurow. (*Die Tertiäre Syphilis*, Wein., 1877.)

That the attacks of syphilitic insanity, like the palsies of syphilis, may at times be temporary and fugitive, is shown by a curious case reported by Dr. H. Hayes Newington (*Journ. Ment. Sci., London*, xix. 555), in which along with headache, failure of memory, and ptosis in a syphilitic person, there was a brief paroxysm of noisy insanity.

Diseases of Brain Substance.—The psychical symptoms which are produced by syphilis are often very pronounced in cases in which the paralysis, headache, epilepsy, and other palpable manifestations, show the presence of gross brain lesions. In the study of syphilitic disease of the brain membranes, sufficient has been said in regard to these psychical disturbances; but the problem which now offers itself for solution is as to the existence or non-existence of syphilitic insanity, *i. e.*, of an insanity produced by specific contagion, without the obvious presence of gummatous disease of the brain membranes. Very few alienists recognize the existence of a distinct affection entitled to be called syphilitic insanity, and there are some who deny that insanity is ever directly caused by syphilis. It is certain that insanity often occurs in the syphilitic, but syphilis is abundantly joined with alcoholism, poverty, mental distress, physical ruin, and various depressing emotions and conditions which are well known to be active exciting causes of mental disorder. It may well be that syphilis is in such way an indirect cause of an insanity, which under the circumstances could not be properly styled syphilitic.

If there be disease of the brain cortex produced directly by syphilis, of course such disease must give rise to mental disorders, and, if the lesion be situated in such a way as to affect the psychic and avoid the motor regions of the brain, it will produce mental disorder without paralysis, *i. e.*, a true insanity: again, if such brain disease be widespread, involving the whole cortex, it will cause a progressive mental disorder, accompanied by gradual loss of power in all parts of the body and ending in dementia with general paralysis; or, in other words, it will produce an affection more or less closely resembling the so-called General Paralysis of the Insane, or Dementia Paralytica.

As a man having syphilis may have a disease which is not directly due to the syphilis, when a syphilitic person has any disorder there is only one positive way of determining how far said disorder is specific, namely, by studying its amenability to anti-syphilitic treatment. In approaching the question whether a lesion found after death is specific or not, of course such a therapeutic test as that just given is inapplicable. We can only study as to the coexistence of the lesion in consideration with other lesions known to be specific. Such coexistence of course does not absolutely prove the specific nature of a nutritive change, but renders such nature exceedingly probable.

What has just been said foreshadows the method in which the subject in hand is to be here examined, and the present chapter naturally divides itself into two sections: the first considering the coexistence of anatomical alterations occurring in the cerebral substance with syphilitic affections of the brain membranes or blood-vessels, the second being a clinical study of syphilitic insanity.

In looking over literature I have found the following cases in which a cerebral sclerotic affection coincided with a gummatous disease of the membrane. Gross and Lancereaux (*Affect. Nerv. Syphilis*, 1861, p. 245) report a case having a clear syphilitic history, in which the dura mater was adherent to the skull. The pia mater was not adherent. Beneath, upon the vault of the brain, was a gelatinous exudation. The upper cerebral substance was indurated, and pronounced by M. Robin, after microscopic examination, to be sclerosed. At the base of the brain were very atheromatous arteries and spots of marked softening.

Dr. Jos. J. Brown (*Journ. Ment. Sci.*, July, 1875, p. 271) reports a case in which the symptoms were melancholia, excessive irritability, violent outbursts of temper, very positive delusions, disordered gait, ending in dementia. At the autopsy, which was very exhaustive, extensive syphilitic disease of the vessels of the brain and spinal cord was found. The pia mater was not adherent to the brain. The convolutions, particularly of the frontal and parietal lobes, were atrophied with very wide sulci, filled with bloody serum. The neuroglia of these convolutions was much increased, and "appeared to be more molecular than normal, the cells were degenerated and in many places had disappeared, their places being only occupied by some granules." These changes were most marked in the frontal convolutions.

H. Schule reports (*Allgem. Zeitschrift f. Psychiatrie*, xxviii., 1871–2,) a very carefully and meritoriously-studied case. The symptoms during life exactly simulated those of dementia paralytica. The affection commenced with an entire change in the disposition of the patient; from

being taciturn, quiet, and very parsimonious, he became very excited, restless, and desiring continuously to buy in the shops. Then failure of memory, marked sense of well-being, carelessness and indifference for the future, developed consentaneously with failure of the power of walking, trembling of the hands, inequality of the pupils, and hesitating speech. There was next a period of melancholy, which was in time followed by continuous failure of mental and motor powers, and very pronounced delirium of grandeur, ending in complete dementia. Death finally occurred from universal palsy, with progressive increase of the motor symptoms. At the autopsy, characteristic syphilitic lesions were found in the skull, dura mater, larynx, liver, intestines, and testicles. The brain presented the macroscopic and microscopic characters of sclerosis and atrophy; the neuroglia was much increased, full of numerous nuclei, the ganglion cells destroyed. The vessels were very much diseased, some reduced to cords; their walls were greatly thickened, and full of long spindle-shaped cells, sometimes also containing fatty granules.

Dr. C. E. Stedman and Robt. T. Edes report (*Amer. Jour. Med. Sci.*, lxix., 433,) a case in which the symptoms were failure of health, ptosis, trigeminal palsy with pain (anæsthesia dolorosa), finally mental failure with gradual loss of power of motion and sensation. At the autopsy the following conditions were noted: apex of the temporal lobe adherent to dura mater and softened; exuded lymph in neighborhood of optic chiasm; sclerosis of right Gasserian ganglion, as shown in a marked increase of the neuroglia; degeneration of the basal arteries of the brain.

These cases are sufficient to demonstrate that sclerosis of the brain substance not only may coexist with a brain lesion, which is certainly specific in its character, but may also present the appearance of having developed *pari passu* with that lesion, and from the same cause.

(*To be continued.*)

EDITORIAL DEPARTMENT.

PERISCOPE.

A Typical Neurotic.

The *Med. Times and Gaz.*, April 5, 1884, says, that in the life of the late Mr. South, which has been recently published by Mr. Murray, there occurs (p. 135) a vivid description from Mr. South's pen of an illness with which he was seized in 1822, being then 25 years of age. He had been working very hard, he tells us, being every day six or seven hours in the dissecting-room, and in the evenings occupying himself with examining his pupils, or sitting up very late at night writing and drinking half a score cups of tea. In the midst of this work he was unexpectedly brought to a stand by illness.

"On the evening of March 21, 1822, I had gone to bed rather earlier than usual, and had been asleep, I presume, about an hour, when I was aroused by seeing over me a gigantic hand and dagger held over my chest. Everything else in the room I saw distinctly, as it really was. * * * As might be supposed, I was horribly terrified, as I was lying on my back and utterly incapable of moving so as to escape the object of my alarm. At last, however, I managed to change my position, the spectre ceased, and, at the same time I threw up a mouthful of the most acid fluid, which I can only compare to vitriol. I was very much agitated for some time. * * * * Next morning I was very ill; had a cobwebby sensation over the left side of my face, and a most curious feeling about the hinder upper part of the left parietal bone, as if my brain were being continually scratched with finger nails, in a space about as big as a crown piece. I do not recollect whether I had any headache, or what the state of my pulse was, but Dr. Cholmeley, who soon came to me, ordered me to be cupped on the scalp and blistered, and I think I was also cupped in the nape two or three times in the course of a few days and blistered, besides taking calomel and antimony, but not to produce ptyalism. In the course of the week the scratching sensation was relieved, but did not subside. I was soon after attacked with numbness, first of one leg and foot, and then of the other, so that I seemed at these times to be walking with my foot in a pillow. My hands would also become alternately numb in like manner, and in the space between the right thumb and forefinger I had the sensation of a very hot iron resting on it, which sometimes was positively painful. Excepting the scratching in my brain, which continued for some weeks incessant and more or less severe, and the cobwebby feeling, which was not constant, but always restricted to the left side of my face, the numbness in my feet and hands alternated in a very strange manner. Sometimes my foot on one side alone was numb, sometimes the hand on the same side would be numb at the same time, or would be numb alone: at other times my right hand and my left foot would become numb, and then, again, the left hand and the right foot; and these sensations would last a day or two, but without any regularity. But the most persistent was the burning sensation, which was always confined to the right hand. These sensations, at very uncertain periods, continued with me for many years, and were always attendant on any digestive derangement. There was, however, only this exception, that the scratching subsided entirely after two or three years. The severity of this first attack began to diminish about three weeks or a month from its onset, and at the end of six weeks it was thought advisable I should go into the country, and the day was fixed, but on the previous evening, as I was quietly lying reading on the sofa, I was suddenly seized with violent palpitation of my heart,

which being the first time I had felt it, terrified me so much, and was so distressing, that I thought I was about to die immediately. The choking sensation and the violent irregularity of my heart, as if it were being wrung out of place, was most terrific, though I had often witnessed the same condition in my dear father, who for years had been subject to palpitation, always accompanied by severe and continued eructation for two, three, or more hours. After an hour or two the severity of the attack subsided, but my pulse was very irregular, and for two or three days the least exertion, such as merely walking across the room, brought on the palpitation, and for some time I was obliged to lay hold of chairs or anything else at hand, as I had a terrible dread of falling to the ground. [After this Mr. South went to stay in the country, and his heath slowly improved.] The palpitations did not cease, although they became less severe. But in reference to them was a circumstance which I could not explain. Whilst I was on horseback and trotting about, I had not any palpitation, and felt tolerably well, but directly I put my foot to the ground the palpitation recurred."

Extra-Uterine Gestation.

Dr. W. A. Michie reports this very interesting case in the *Brit. Med. Jour.*, April 12, 1884:

On January 24, 1882, J. C. came under observation, suffering from ulceration of the ós uteri, and hypertrophied cervix uteri, with debility, caused by a long-continued leucorrhœal discharge. Eight days later, caustic potash (solid) was applied freely to the os, followed by vaginal injection of dilute acetic acid. Two days subsequently, having been out of bed and been exposed to cold, she suffered from sudden and severe pain in the hypogastrium, which culminated in an acute attack of metritis. The temperature rose to 104°; and the uterus, enlarged and tender, extended upwards to the umbilicus. The acute symptoms subsided in about five days, and, at the end of three weeks, the uterus had regained its normal size. Soon afterwards, she thought herself pregnant, the last menstrual period having been in January. She continued in that belief until August 31, when I had an opportunity of seeing her in bed, from sickness and vomiting. Examination of the mammæ and abdomen then revealed signs of an ordinary pregnancy, apparently near the end of the seventh month. Two months later, I again saw her, she having called at my house. I made no examination, but she seemed in most perfect health, and to all appearance a woman near her confinement. I lost sight of her for about five months, until March 21, 1883, when I was called, as she had slight bronchitis and nervous debility. She give the following account of her case, in the interval, from the end of October, 1882, to March 21, 1883:

Towards what she thought the end of the ninth month of pregnancy, she had frequently recurring pains, as if those of labor, extending over two or three weeks. There were no fœtal movements after the eighth, or first week of the ninth, month. In the tenth (and perhaps the eleventh) month, she enjoyed fair health. She entered the Edinburgh Infirmary under Dr. Simpson, about January 1, 1883, and remained under his care for six weeks; having been told that she suffered from a tumor in the abdomen, for which nothing, under present circumstances at least, could be done, she returned home, and took to bed. She stated that she had menstruated at least twice since she left home until now, and, about the time she left the infirmary, she perceived a slight diminution in the size of the abdominal swelling, and it had continued to diminish until now. Latterly, there had been constant diarrhœa, with paroxysmal and recurring pains in the right side of the abdomen.

I discovered a large movable tumor lying on the right side of the abdomen, extending from the umbilicus into the pelvis, where it could be felt high up through the roof the vagina, posterior to the uterus, and pressing towards the rectum. The tumor, which was elongated and indurated, was somewhat uniform and smooth on the surface, and painful to pressure in the right iliac region. There had been no bladder symptoms, nor did vaginal examination reveal any uterine displacement, or apparent enlargement. The mass pressing more towards the rectum set up tenesmus, and apparently kept up a catarrh of the bowel. During the next two months, from March 21 to May 17, I saw her on two or three occasions; and at each visit the pain in the abdomen, hectic, tenesmus, and diarrhœa were more marked, while the tumor was sinking more into the pelvis. On May 17, I was called to her. She said there had been constant pain in the rectum for some days with incessant desire to go to stool, and that the pain that day had been excessive and was still increasing. Examination showed the rectum to be blocked with a fœtal skeleton, enveloped in a tough fibrous band ruptured at the lower end. After more than an hour's work, the patient being under chloroform, nearly the whole of the skeleton of almost a full-grown fœtus was removed from the rectum. One frontal and one parietal bone were removed subsequently. The woman made a perfect recovery, and was out of bed in two weeks.

Perforating Ulcer of the Foot in a Child.

Mr. Edmund Owen reports this interesting case in the *Lancet*, April 5, 1884:

Ellen L——, a girl aged eleven years, was admitted to the Louise ward on December 27 last, for an ulcer which extended deeply into the sole of the left foot at the level of the heads of the metatarsal bones. The sore was almost as wide as the foot, and nearly as long in the antero-posterior measurement as it was from side to side; the adjoining skin was thickly crusted with horny, discolored scabs of epidermis. The foot was stunted, and the toes had been evidently much affected by the long-standing disease, the first appearance of which dated from the time when she was sixteen months old. Small pieces of bone had at various times come away spontaneously from the toes through the ulcer; there was, at the time of her admission, no trace of the little toe, the fourth toe was represented by a small nodule, and the third by a rather larger nodule; the great toe was the only one that possessed a nail. The foot was very warm, and was

covered by beads of perspiration; its dorsal surface was highly pigmented, and possessed a considerable growth of long hairs. There was no marked anæsthesia in the foot, but at the knee of the affected side there was complete absence of tendon-reflex. On the right side also the knee-jerk was considerably diminished. The child had never suffered much pain from the ulceration; there was some glandular enlargement in the groin. There had been no ataxy, crises, or pains; the sore had never been healed from the time of its first appearance. In various parts of the body were extensive patches of pigmentation, the contrast being heightened by the presence of leucoderma in their midst. The pigmentation was noticed at birth; the family history was good. In the course of the previous year the child had been an inmate of the hospital under the care of Mr. Thomas Smith, and from the careful notes which were then taken by Dr. Angel Money, and from those since added by the present registrar, Dr. Chaffey, this short report has been compiled. Under the treatment of absolute rest in bed for over two months the ulcer completely healed, though a dusky patch of congested skin has recently appeared upon the dorsum of the foot, which looks suspiciously like the forerunner of another attack of ulceration.

Remarks by Mr. Owen.—During the last few years many cases of perforating ulcer of the foot have been reported in England, almost all of the subjects of them having been adult males. In the adult female but very few cases have been observed, and a report of the condition being found in childhood is of great interest. In general appearance and characteristics this ulcer closely resembled the condition as observed in the adult, and its report is interesting in that it strongly opposes the theory that the *mal perforant* is the result of local pressure. In the adult the ulceration frequently begins beneath or against a part of the foot which is hard and tender from corns. The ulcer in this child was evidently secondary to degeneration of nerve-tissue, and from the absence or impairment of the patellar-reflex on the two sides, the seat of the degeneration must be looked for in the spinal cord.

The Anatomy of the Hymen.

Dr. S. Pozzi has been making some investigations on this subject, which he thus formulates in the *Gaz. Med. de Paris*, February 23, 1884:

1. The hymen is an appendage of the vulva, and not of the vagina; it is formed at the expense of the uro-genital sinus, which also forms a short vestibular canal, this last being the entrance to the vaginal canal.

2. The name *bulb of the vagina* has been unwisely given to the lower part of the vascular plexus, which occupies a prominent position in that canal. There is no ground for distinguishing a distinct organ here, and it should not be compared to the bulb of the urethra in man. It may as well be said that the corpora spongiosa are the analogues of the labia minora.

3. An attentive examination of the vestibular region in woman will show a small band or frænum (*bride*) between the clitoris and the meatus, about two-tenths of an inch long in the adult, easily recognized by the rectilinear outline of its borders, marked by a median furrow, and divided inferiorly so as to encircle the meatus. When the hymen exists, it appears to be continuous with this frænum. Pozzi proposes to call this small band, now described for the first time, the male frænum of the vestibule (*bride masculine du vestibule*).

4. The study of the balano-urethral frænum—so noticeable in cases of hypospadias—shows the identical connections between that large band and the atrophied frænum (*bride*) of the female.

The bifid condition at the meatus and its continuity with the hymen are easily shown. But in hypospadias it is clear that the frænum is a vestige of the corpus spongiosum arrested in the embryonic stage. The hymen of the hypospadias then, proceeding from the frænum, is an appendage of the corpus spongiosum, and is the terminal part or bulb. This conclusion may be applied to the female organ, and it may be said that *the hymen in the female is the analogue of the bulb of the urethra in man; it is the bulb arrested in the fœtal state, non-erectile, and membraniform.* [Henle has noted the frequent presence of cavernous or erectile tissue in the hymen.]

5. The connections of the gland of Bartholin to those of Cowper may be also easily made out. The considerable length of the excretory canal for the male glands, compared with their shortness in the female, should be especially considered. This admits of the opening of the canal considerably in front of the membranous region, at a certain distance in front of the posterior part of the bulb; that is to say, at a point exactly corresponding to the opening of the duct of Bartholin, in front of the hymen, at a certain distance from the fourchette. The opening of Bartholin's gland in the pre-hymeneal portion of the vulva is the origin of that singular lengthening of Cowper's duct.

6. The male frænum of the vestibule in woman is the vestige of the anterior or cylindroid portion of the corpora spongiosa, just as the hymen is the vestige of their posterior or ovoid portion.

Inoculation of Intermittents.

Dr. C. Gerhardt (*Zeitsch. f. Klin. Med.*, vii. 4,) instituted in two individuals the following experiments: He abstracted blood from a patient, while the latter was suffering from a seizure of intermittent fever, and inoculated with this blood two healthy persons. He observed the following precautions:

1. The locality in which the experiment is to be made must be totally free from malaria.

2. The persons whose blood was employed for this purpose must not suffer from syphilis or any other inoculable disease.

3. The persons to be inoculated must agree to the experiment, and voluntarily subject themselves to it.

4. The temperature record of the individuals to be experimented upon must have been carefully kept for some time preceding the experiment, and evince not the least increase of temperature. They must have been at the time of the operation, and for a long time preceding the same, utterly free from all febrile symptoms.

The experiments themselves gave the following result:

1. The intermittent fever, caused in this manner by inoculation, is distinguished from the natural malarial fever by greater irregularity of the attacks of the former.

2. After a number of single or group-wise attacks, a regular quotidian analogous to the form present in the original source, developed itself in the one person on the twelfth day, in the other on the twenty-fifth.

3. The fever, thus artificially produced, reached in both cases such a high degree (temperature as high as 41.1° C., and deviation of fever fully twenty-four hours), that the experiment had to be interrupted by the administration of quinine.

4. There is no doubt, that the pathogenic element of malaria is present in the blood of a patient suffering from intermittent fever, at the time of a seizure, and that it is then, together with the blood, inoculable.

5. With very few exceptions, all the seizures, by which the inoculated persons were attacked, set in at the hour at which the inoculation had been made, or if they had not done so (as was a few times the case), they reached their acme at that time. The period of incubation was difficult to determine; the first febrile movement made its appearance in the one case on the seventh, in the other on the twelfth day, and the graver series of seizures began in the one on the seventeenth, in the other on the twenty-fifth day.

This agrees with what has been usually taught to be the period of incubation—from seven to twenty-one days.

The Fever of Growth.

The *Med. Record*, April 5, 1884, quoting from *Centralb. für Chir.*, January 26, 1884, says:

This affection, first described by Bonilly, in 1880, is characterized by a fever pursuing a specific course, and accompanied by pain and tenderness in the epiphyses of nearly all the long bones, and is followed by a period of very rapid growth of the individual. It may occur at any time between the fifth and twenty-first year. It is occasioned by excessive exercise, as long walks, standing for a considerable time, fatiguing gymnastic exercises, swimming, etc. Bonilly distinguishes three forms of the disease:

1. Acute, with rapid course, the most common.
2. Acute, but more protracted than the first.
3. Chronic or relapsing (*trainante*).

Fever or tenderness of the bones are common to all these forms. The pain occupies the "juxta-epiphysal" zone, and is most commonly located in the lower ends of the femora, though all the long bones are not infrequently affected. The joints are not involved, as a rule, though sometimes serous effusions, more especially in the knees, are met with. The more rapid form runs its course in from twenty-four to thirty-six hours. The second variety may be of several days' duration, and may even be accompanied by typhoid symptoms, but its termination is always by a rapid return of temperature to the normal. The chronic form is characterized by a succession of attacks running along for weeks and months. The prognosis is favorable, though relapses are common. Quinine should be given during the attacks, and in the intervals all fatiguing bodily exercises should be avoided, while attention is directed to a building-up of the general condition. The following case of growing fever is reported by Dr. Guillier: A child, eleven years old, of rather delicate constitution, was taken suddenly ill with convulsions, high fever, and pain in all the extremities. There was tenderness over the epiphyses of the femur, tibia, and humerus on either side. A slight improvement on the next day was followed by an increase in all the symptoms in the evening. Under antipyretic treatment the fever subsided on the third day. After five weeks the child was able to leave the bed, though she was still very weak. During that time the height increased two and one-half inches.

The Relationship of Malignant Disease to the Food and its Treatment by Diet.

The *Med. Times* says that in a communication to the Académie de Médecine de Bruxelles, M. Van den Corput made a suggestive reference to the etiology of cancer (*Revue de Thérapeutique Med. Chir.*, January 15). Upon considering the geographical distribution of cancer the author found that it was almost unknown in hot countries, and also among certain religious communities in other latitudes which abstain from the use of meat. The only apparent connection between these two classes is the diet. It is apparently, therefore, to an exaggerated animal diet—which at the same time causes an excess of chloride of sodium in the system—that we must look for the principal pathogenetic cause in the cancerous diathesis. This must reside in an infection of the organism, either by certain nitrogenized products susceptible of disturbing or changing the normal nutrition processes, or by certain inorganic elements, such as the phosphates, capable of favoring the histogenesis of neoplasms. A confirmation of this view was found in the rapid emaciation of the patients, accompanied by the decreased discharge of urates in the urine. The application of these views to the treatment of cancer is obvious, but it does not appear that the author has succeeded as yet in demonstrating the correctness of his views by clinical investigation.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Those of our readers who would like to pursue the vivisection question lately aired in our pages, can obtain from the "Woman's Branch" of the Pennsylvania Society for the Prevention of Cruelty to Animals a pamphlet of eight pages in which the ladies offer a reply to the letters of Drs. Mitchell and Wood, which we published. As the matter seems to rest on a question of memory of the gentlemen concerned, we ourselves refrain from expressing an opinion.

——In a reprint from the Indiana State Board of Health, Dr. H. V. Sweringen gives a brief

statement of the importance of ventilation, food, sleep, building, etc., to public health.

——Dr. A. Jacoby, of New York, has a very erudite article on congenital lipoma published as a reprint. He has seen and describes several remarkable cases of this disease, and enters fully into the literature of the subject.

——A noteworthy article is before us by Dr. Chas. S. Turnbull, of Philadelphia, in which he calls attention to the great value of boro-glyceride in the treatment of contagious ophthalmia. This new agent promises to take a leading position in the therapeutics of diseases of the eyes. He uses a fifty per cent. solution. It is especially valuable in the case of young children.

——The report of the Pennsylvania Hospital for the Insane for 1883 contains a full memorial of the late Dr. Thomas S. Kirkbride, who for so many years was physician and superintendent. His name was associated for nearly half a century with the progress of diseases of the mind in this country.

——The Address of the President of the N. Y. Neurological Society, Dr. W. J. Morton, was upon "Neurological Specialism." He strongly advocates the increase of specialists in medicine.

BOOK NOTICES.

Shakespeare as a Physician. By J. Portman Chesney, M. D. 8vo., pp. 226. Illustrated. J. H. Chambers & Co., St. Louis.

The title page of this volume informs us that it "comprises every word which in any way relates to medicine, surgery, or obstetrics, found in the complete works of that writer (Shakespeare), with criticisms and comparisons of the same with the medical thoughts of to-day." These extracts are arranged under the various headings, Obstetrics, Psychology, Neurology, Pharmacology, Etiology, Dermatology, Organology, Chirurgery, and Miscellaneous. It will be seen that out of this net, no medical passage is likely to escape.

The author is evidently a curious reader and a careful student of the great dramatist; and the most versed Shakespearian will find new things in his pages, salt in his remarks, and cunning in his comments.

There are some points about his work which to us mar the pleasure in its perusal. One is the sensational and often slangy headings to his chapters; another, that the type does not distinguish between the extracts and the comments; that too little attention is given to various headings; and that the pictures are badly printed. In the next edition we hope he will reform these errors, either indifferently or altogether, and thus render his volume more attractive.

Conversations on the Subject of Medical Ethics, with an Account of the Medical Empiricisms of Europe and America. By Frank H. Hamilton, M. D. Small 8vo., pp. 129. Bermingham & Co., New York city.

The much-discussed matter of "Old Code and New Code" is here taken up in an imaginary conversation between two physicians of diverse opinion, and each represents the merits of his own view. Neither is satisfied with matters as they stand, though the one is for more sweeping reforms than the other. Considerable side talk is held of the various 'isms and 'pathies which from time to time have arisen. We observe that the author falls into the common error of supposing that the "eclectic" schools derive their name from claiming to select the best out of all schools; the real origin was that they claimed that medicines have an eclectic effect on certain organs and tissues.

Drugs and Medecines of North America, Vol. I., No. 1.

This very attractive quarterly, of which we have the first number, is under direction of J. N. and C. G. Lloyd, of Cincinnati. It appears that the design is to carry it through the flora of North America in regular order. If this work is to be continued throughout on the same scale as that of the first number, the editors have a great task ahead of them—one in which, however, they must have the good wishes of botanists, pharmacists, and physicians. This number offers 32 pp., 4 full-page plates, and 9 figures. All the illustrations are good and characteristic. The one by Mrs. Stowell is not only artistic, but perfect in anatomical detail.

Plate One, Clematis Virginiana, is absolutely life-like. The order of Ranunculaceæ is only partly finished in the part before us. The type is good, and so far as we may judge hastily of a text involving so much labor, it is exact, and conscientiously done. It is not often that a book gives promise of so much, and then realizes to the last all the good we anticipated from the earlier numbers. We hope this may be an exception to the rule.

Having been thus explicit in regard to the merits, we are bound to be equally frank and say that the alleged or supposed provings given on pp. 15, 24 and 32, can have no value outside of the school in which infinitessimal doses and enormous credulity go together.

THE
Medical and Surgical Reporter,
A WEEKLY JOURNAL,
ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Quarterly Compendium of Med. Science, -	**2.50**
Reporter and Compendium. - - - -	**6.00**
Physician's Daily Pocket Record, - -	**1.50**
Reporter and Pocket Record, - - - -	**6.25**
Reporter, Comp. and Pocket Record, - -	**7.00**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D. G. BRINTON, M. D.,
115 South Seventh Street,
PHILADELPHIA, PA.

AN OBSTETRIC CASE
(Price, $15.00),
OR
AN ELECTRIC BATTERY
(Price, $25.00),
AS PREMIUMS.

Any subscriber to the REPORTER who will send us before the 1st of July the names of *three* new subscribers with their yearly subscriptions ($15) or *five* new subscribers with $25.00, will receive, for the three, an Obstetric Case complete, and for the five, an Electric Medical Battery complete. They are new, of the best make, and of guaranteed excellence. The new subscribers will receive the REPORTER *free* from the date of the remittance until July 1st next.

Address DR. D. G. BRINTON,
115 South Seventh Street,
PHILADELPHIA, PA.

WHEN IS A FŒTUS A HUMAN BEING?

Recently in Berlin a very interesting case was tried in the criminal court. K——, a barber, not privileged to perform midwifery, was sent for by a woman in labor. He at once applied the forceps, and in such a butcher-like manner, that he broke the bones of the skull and killed the child. Medical testimony proved that the case was a normal delivery, that there was no indication whatever for the application of the forceps, and that the child would have been born alive had it not been thus roughly treated. Certainly, the quack was convicted. The law in Prussia says, that manslaughter is the careless killing of a human being (eines menschen). The question to be decided, and in such a case having been never previously determined, was: When does a fœtus become legally a human being (ein mensch)? The case was carried before the highest tribunal, and this has decided that a fœtus becomes legally a human being the moment labor has begun. The defense had contended, that as no part of the fœtus had as yet left the mother, and as only one part of it had left the uterus, it still was a fœtus. But the Court remarked, that it would be wrong to consider a fœtus in one act of the delivery a human being, and in another act a fœtus; that its existence as a human being in the sense of the law began at the time when it commenced to break its connection with the mother, when it made its first effort for a separate existence.

While it may, perhaps, be more scientific to consider a fœtus a human being at the moment of its first breath, for the purpose of punishing such an outrageous quackery as that evinced in the foregoing case, the decision, probably, is a wise one. Besides, were the act of breathing alone to decide the question, many cases with technical difficulties might arise, as, for instance, those where, as in cases of breech presentation, or in turning, the feet are first born, and with the interruption of the circulation the fœtus, while still within the body of the mother, makes an effort at breathing, and similar cases. Further, the plainer, the less dubious such a decision, the better for the protection of human society. If it is

once determined that a fœtus is a human being from the first beginning of the labor, *i. e.*, at full maturity—there is no room left for doubt, and no opportunity given to a shrewd criminal lawyer to free his client from punishment by mere technical points of law: and this is the reason why we call the decision a wise one.

INFECTIOUS ORCHITIS.

Occasionally cases of orchitis are met with where the individual affected tells us that he has no idea whatever how he contracted the disease. We have more than once known physicians to shrug the shoulders, and insist that the patient, were he to tell the truth, would very well be able to give the cause—gonorrhœa—of his epididymitis. Others again, coming nearer the real pathogenic element, expressed it as their opinion that exposure to cold in persons with rheumatic tendencies, or in such as were formerly suffering from orchitis, was an occasional causing element.

It has now been determined that there exists an epidemic, infectious form of orchitis, which is usually met with in a locality at one and the same time with epidermic parotitis (or mumps) and with epidemic nephritis. In a late meeting of the Berlin Medical Society (February 11, 1884, reported in *Deutsch. Med. Zeitg.*, 1884, No. 16), a debate took place on this subject. Occasionally the disease would begin, said Mr. Croner, with parotitis, and a few days later nephritis develops itself on one testicle, or in females, one labium majus becomes the seat of the affection, while in again others, the inflammation of the testicle alone constituted the disease. Such cases also happen sporadically.

It is, therefore, probable that when a person, otherwise healthy, is suddenly attacked by acute inflammation of the testicle, and especially, when cases of parotitis happen in the same neighborhood, we can take it for granted that he is suffering from the infectious form of the malady; and the same holds good of those peculiar and sudden abscess formations in the large labia of women, an occurrence which heretofore, at least as regards its etiological points, has but too often baffled the skill of the expert. And in all such cases it may be well to look after the general condition, and especially after the kidneys of the patient; and we ourselves were more than once astonished at the violent general affection in such cases, and at the dropsical symptoms at times appearing. In all, especially infectious diseases of the glandular system, the kidneys seem very prone to participate, as they besides also have a tendency of doing in all febrile infectious maladies, as smallpox, scarlatina, puerperal fever, and even, after Henoch, in varicella. The fact teaches us to use in these cases, with reference to the kidneys, the same foresight and precautions as are generally employed in scarlet fever.

ON TREATMENT BY THEORIES.

It has been several centuries since Bacon wrote his *Novum Organum*, in which he set forth the correct principles of scientific philosophy. They have guided the development of modern thought. In medicine, however, they have had but tardy admission. Even to this day too many of our procedures are controlled by preconceived theories, rather than by the result of observation.

Not only does this apply to those forms of practice which are not recognized as scientific, but also in many departments of our own school. This has lately been very noticeable in methods of treatment based on the theory of germs. It is painful reading to peruse the reports from the Berlin hospitals of the anti-parasitic treatment of phthisis. The patients were selected from a class stated to hold out a fair prospect of recovery. Under the steady administration of nauseating drugs, of irritating inhalations and other germicides, the majority of them died in five weeks, and those who survived longer seemed to owe it to their opposition to a continuance of the treatment.

Inasmuch as the latest researches have thrown great doubt on the alleged discoveries of Dr. Koch, at least so far as they make out the bacillus to be a cause of tuberculosis, the folly of such attempts is only too manifest.

With the constant endeavor of scientists to seek

notoriety by the premature statement of theories of disease, it becomes the part of every prudent practitioner to stick to the old lines of therapeutics, rather than to jeopardize the chances of his patients by running after new things.

We blame the homœpath for his servility to his exclusive dogma; we denounce the eclectic for his vague hypothesis of dynamics; but we are equally to blame when we adopt and carry into practice every new-fledged theory of histologists.

The instance we have given from the treatment of consumption could be easily paralleled from other diseases. Diphtheria, typhoid fever, and cholera, offer numberless examples of wild medication based on unripe observation. The principle we should ever observe is to hasten slowly in any departure from plans of treatment which relieve symptoms and increase the comfort of the sick. Specifics are scarce: many say it is unphilosophical to look for them—at any rate, they are to be sought not through *a priori* theories of disease, but from the results of clinical observation.

SUDDEN DEATH AFTER MORPHIA.

It has now been often observed, that in those cases of organic diseases of the heart in which, due to degeneration of its muscular fibres, the organ is very weak, hypodermic injections of morphia suddenly cause the death of the patient. It is the more necessary to draw the attention of practicing physicians to this fact, as the often very severe attacks of pain, and the seizures of dyspnœa, so characteristic of these heart-lesions in their later stages, are so promptly relieved by the hypodermic medication. In *Fortsch. der Med.*, 33, 1883, Dr. Runeberg's case, reported in the *Centrlbl. f. Nervenheilk*, 13, '83, is mentioned, and a number of similar cases added. R.'s case was as follows:

In an army officer, æt. 40, strong and vigorous, and suffering from severe attacks of angina pectoris, R. made a morphia injection of one-quarter of a grain. About two minutes later, patient suddenly gave a start, opened widely his eyes, whose pupils became dilated to their utmost, and —was dead. The autopsy evinced extensive sclerosis of the coronary arteries. The muscular tissue was degenerated. Neither potatorium nor liver were etiological moments. Though R. believes that the lesion was such as to have caused death at any moment, the subcutaneous injection of morphia evidently accelerated the exitus in R.'s opinion.

Dr. Unverricht, in Breslau, adds to this, that his own experience had taught him caution with the hypodermic injection of morphia in all cases of organic heart-disease, if accompanied by weakness of the muscle; and in conclusion, he mentions Israel's case, where death set in after the injection of one-sixth of a grain of the same drug. The disease here was mitral insufficiency, with grave morbus Brightii, the compensation having ceased. We can contribute one case of our own, where, in a case of fatty degeneration of the heart, the injection of one-sixth of a grain was immediately followed by instantaneous death.

"WOMEN ARE DIRTY CREATURES, ANYHOW!"

This not very complimentary remark was dryly made by a physician of considerable experience among women, during a discussion of Dr. White's remarks before our County Society, which we have noted in our editorial on gonorrhœa. At first we were staggered by the ungallantry of the remark, and wondered at it. A few words more, and we not only realized the full force and meaning of the remark, but felt that it was so eminently true that a few words of advice on the subject would be most opportune.

The remark was meant for the *vagina*, and our friend went on to ask how many women ever syringe out the vagina, unless ordered to do so by a physician, and yet how few women are there who have not some kind of a vaginal or uterine discharge? The old university resurrectionist, Nash, used to say (more forcibly than elegantly) that every man with an elongated prepuce had a cheese-factory at the head of his penis; by which he meant to convey the idea of the accumulation of smegma which occurred in those so formed,

unless they were very particular about washing the glans. So our friend referred to the accumulation and decomposition of the various discharges in the vagina, which must necessarily result in making this cavity a very foul place indeed.

The practical advice suggested by this remark is that all women should provide themselves with a good suction syringe, and at every bath, when the surface of the body is washed, the cavity of the vagina should be well syringed with soap and water.

Extended comment is unnecessary; these few words will suggest to every physician the propriety of such a procedure, and will, no doubt, cause him to give such good advice to all his female patients.

Notes and Comments.

Cure of Alcoholic Tremor by Veratria.

The view has been often pronounced that the tremor, as met with in potatores, in cases of central degeneration, in fevers, etc., really is a muscular contraction, in which the number of oscillations in a unit of time is not sufficient to cause tetanus, and that this may happen as well in consequence of want of innervation as of muscular degeneration. Acting upon this premise, and upon the fact that after small doses of veratria the muscle reacts on every stimulus by contractions more energetic and more continuous than is normally the case, Dr. Basile Feris (Report of Société de Biol. de Paris, Nov. 26, 1883, *Allg. Med. Central Zeit.*, 2, 1884), thought of making use of this drug in the tremor referred to. He administered to such patients daily four pills, each containing the one hundred-twentieth ($\frac{1}{120}$) of a grain, at intervals of one hour each. His 13 patients (10 potatores, 2 with multiple sclerosis, and 1 tremor after typhoid fever) were perfectly and totally cured of their tremor within a period of from five to fifteen days! Testing them by writing (perhaps the most reliable method to show an improvement in a person suffering from tremor), they all denoted a visible improvement on the very first day, as the tests one hour before and one hour after the first pill clearly demonstrated. F. advises, however, for the sake of precaution, no matter how well established apparently the cure, to continue the treatment for about ten days longer, to prevent relapses from happening. F. had opportunity to convince himself that in all his cases the improvement had still continued after the lapse of four months.

If this remarkable cure had not been reported by a Frenchman, we would say that an important and highly valuable discovery had been made. But we have been so often disappointed with cures reported to have taken place in France, and which nowhere else would succeed with the same treatment, that we will wait until we hear from other sources the effect of the remedy. It is well known that in all cases of tremor, especially, however, in disseminated sclerosis (and also in drunkards after a glass or two of whisky), a sudden improvement is very apt to take place, no matter what the treatment at the time. In the *Specialist*, Prof. H. Engel published a lecture of his, in which he reported several such cases—amongst others, that of Professor H. R——, who had been suffering from one of the most pronounced forms of multiple sclerosis. Dr. Engel recommended manipulation; the second day, most of the tremor had disappeared. But should a further trial prove the correctness of Feris's observations, the discovery would be a really valuable one.

Phosphide of Zinc.

The *New York Med. Jour.*, April 5, 1884, tells us that in a recent number of the "Gazette hebdomadaire de médecine et de chirurgie," M. Paul Vigier remarks that, although phosphide of zinc contains twenty-five per cent. of phosphorus, it requires to be given in doses eight times as large as those of phosphorus, for in the system its phosphorus enters into combination with hydrogen, and in that state has only half the activity of phosphorus. Leaving the question of dose out of account, however, much of the disappointment that has been met with in the use of the drug is no doubt to be ascribed to an imperfect salt having been used. In the process of making phosphide of zinc, the salt forms in two different states, one part of it subliming, and the other forming a gray, friable mass. The latter form predominates in the process of manufacture, but is very variable in its percentage of phosphorus. An eighty-per cent. phosphide answers every purpose, but all below sixty per cent. should be rejected. The following convenient method of assay is given: 0.586 gramme of the phosphide, wrapped in a piece of cigarette paper, is introduced into a graduated gasometer, inverted over mercury, and containing 8 ccm. of hydrochloric acid. If the phosphide is pure, it ought to disengage 100 ccm.

of phosphoretted hydrogen completely absorbable by a concentrated solution of sulphate of copper; an eighty per cent. phosphide will disengage 80 ccm. of the gas, and so on.

A New Remedy for Scarlatina-Dropsy.

Dr. P. Heuser writes to the *Deutsche Medizinal Zeitung*, 16, 1882, that he has nearly always achieved a rapid cure in scarlatina-dropsy, and even when internal remedies could be no longer administered, by the following method:

He daily rubs into the skin in the region of the kidneys a mixture of one part of croton oil, with two parts of ol. papaveris. Mostly one such injunction suffices to cause within a few hours the appearance of a severe eruption of the skin, and simultaneously a great improvement in the condition of the patient, and amelioration of all the dangerous symptoms. The change for the better at once sets in with the commencement of the artificial exanthem. If the symptoms again become aggravated, the procedure is repeated. Internally H. administers spirit. mindereri in small doses.

During the time we were in Berlin a quack had probably saved the life of a child suffering from uræmia after scarlatina latens, by employing Baunscheidlismus over the region of the kidneys. This, as is well known, consists of an instrument which is applied to the skin, when by a snapper-like arrangement (as in wet cups the knives), 30 to 50 fine needles are suddenly let fly into the skin. These needles had previously been dipped into diluted croton oil. An eruption followed, and diuresis was re-established.

Localization of Tactile Sensations.

The investigations which have for their object the localization of the cerebral functions, still continue. The motor-sphere is no longer disputed by anybody. Some, as Munk, contend that the sensation of touch also has its centre in the ascending parietal convolutions—the seat of motion, *i. e.*, its will-centre. Recently, Dr. Bechterew, in Petersburg (*Neurol. Centrlbt.*, 18, 1883,) has again taken up this subject, and thus far comes to the following conclusions:

After removal of the so-called motor-sphere in animals, they evince no impairment of any of the following sensations: That of touch, of position (tactile-sense, locality-sense), general sensation, and perception. They have lost only the voluntary motion in the affected extremity. For the perception of tactile impressions, for the muscular sense, and for painful sensations, special centres exist, which are situated near the motor-sphere. The centres for tactile sensations lie immediately posteriorly and externally to the motor-field, while the centres for the muscular sense, and those for painful sensations, occupy the region immediately above the beginning of the fossa Sylvii. The two last-named centres do not lie one above each other, but the one bordering the other; for in cases of limited lesions of this cortical zone, either a disturbance of the muscular sense of the contralateral extremities, or only that of painful impressions is noted.

Bichloride of Mercury in Diphtheria and Croup.

Dr. William M. Thallon contributes two articles on this subject to the *N. Y. Med. Jour.*, April 12 and 19, 1884. Dr. Pepper, of this city, is a great advocate of this treatment. He uses it in large doses, with the following rules to guide him: If the false membrane is increasing, he increases the drug; if it is stationary, he maintains the same dose; if it is decreasing, he diminishes the remedy; and if the membrane has disappeared, he at once stops the bichloride.

He has found it convenient to have two standard formulas, according as he wishes to combine iron with the mercury or not. He generally writes for a three-ounce mixture, with half a grain of the bichloride, so that each teaspoonful contains about one-fortieth of a grain. The following are his prescription models:

FORMULA I.

℞. Hydrargyr. bichlor., gr. ss.
Tinct. ferri chlor., f.℥ iij.
Glycerin., f.℥ ss.
Aquæ, q. s. ad f.℥ iij.
M. Sig. f.℥ j. as directed, in water.

FORMULA II.

℞. Hydrargyr. bichlor., gr. ss.
Vin. pepsin.,
Elixir bismuthi, āā ℥iss.
M. Sig. f.℥j, as directed, in water.

The second formula is the pleasantest way of prescribing the remedy, and it is the one used by Dr. Pepper.

Practically, he now generally begins with the second formula, and, when convalescence has commenced, resorts to No. 1 to get the benefit of the iron.

He does not attempt to explain the action of the bichloride; but bases his claim that it will give better results than other treatment known at present, entirely on clinical evidence. An important point is that the drug should be well diluted, whereby its irritating properties are avoided.

Statistics of Diphtheria.

The *Med. Times and Gaz.*, March 15, 1884, tells us that M. Floraud supplies to the *Revue Mensuelle des Maladies de l'Enfance* some interesting statistics relating to the cases of diphtheria, admitted to the Hôpital Trousseau, in Paris, during 1883. There were 606 cases of diphtheria admitted, of which 165 were pharyngeal, while 441 affected the larynx, or air-passages. Amongst the 165 cases of pharyngeal diphtheria, there were 65 deaths, making a mortality of nearly 40 per cent. The 65 deaths included ten from paralysis, the rest dying from the toxic effects of the disease, or of measles, or scarlet fever. Of the 441 diphtheritic croups, 359 were operated upon with 244 deaths, a mortality of 68 per cent. The 359 cases operated upon included 40 cases of croup complicating measles, and 30 who were under two years of age; and among those who recovered after tracheotomy, there was an infant of thirteen months, three under twenty months, and two which were complicated with measles. The cases which were not operated upon were for the most part those cases in which there was wide-spread diphtheria of both pharynx and larynx, and which were moribund when admitted. These results are said to be the most satisfactory which have been obtained for many years at the Hôpital Trousseau. It is interesting to note that several cases of paralysis occurred after *laryngeal* diphtheria, thus pointing strongly to the identity of pharyngeal diphtheria and "membranous croup."

New Method to Determine the Percentage of Cream in the Milk.

The present method is a very troublesome one, and occupies considerable time. In the last meeting of the Society for Natural Philosophy in Frankfort-am-Main, Dr. Lepsius described Foxhlet's new method, which is as follows: A potash solution is added to the milk, and the latter then shaken with ether. With fine æromeeters the percentage of fat can be then easily determined in the ether. It is said, that while this method permits the same accuracy as the old one, it has the great advantage of great rapidity. In the same meeting the subject of the value of skimmed milk as a nutritive substance was also debated. It was generally admitted, that on account of its cheap price and percentage of albuminous material—this not being at all diminished by the removal of the cream—skimmed milk is of great value, especially for the poorer classes. At the same time it was shown, that milk with the cream left in it, but diluted with water, loses in value as a nutritive substance, as the same percentage of albumen is no longer contained in the fraudulent fluid. They all agreed that substances of such a common use as milk should be daily inspected by a government official, and any fraudulent admixture be made widely known.

Treatment of Burns and Scalds.

Dr. C. F. Naismith writes to the *Lancet*, April 12, 1884, that he has secured most excellent results from the following method:

At first he used the soda solution, followed by carron oil, but soon abandoned them as unsatisfactory. The former owes its reputation to the cold water, and not to any soothing property in the soda. His invariable practice, however extensive the scald, has been to place the injured member in ice-cold water, keeping it there till all pain has disappeared—say in from two to four hours, or even longer. The water heats rapidly, and must be kept cold either by ice or constantly renewing. As long as the scalded part is kept under water (provided it is cold enough) no pain is complained of, and symptoms of shock are much lessened. When the limb will bear removal from the water without pain, he lays on thickly lead acetate and resin ointment (one drachm to one ounce), and envelopes in cotton wadding. He has used this ointment also in erysipelas with the best results, all symptoms of inflammation rapidly disappearing. Should severe suppuration occur, instead of the lead acetate a few drops of creasote may be added to the resin ointment, as recommended by Druitt. By this treatment pain and shock are reduced to a minimum, opiates are seldom required, and danger to life is, he believes, greatly averted.

Treatment of Compound Fractures of the Skull.

From the *Brit. Med. Jour.*, March 22, 1884, we learn that Dr. Barling gave before the Midland Medical Society, an abstract of nineteen cases of compound fracture of the skull treated by trephining, and drew attention especially to the mortality after operations, when symptoms had arisen, or when the dura mater was wounded. Of the nineteen cases, nine recovered, all being operated upon immediately after the injury, and the dura being unwounded. Immediate trephining was advocated in all cases of compound depressed fractures, and in incised and punctured fractures, whether symptoms existed or not. If there was any doubt as to the condition of the internal table, it was suggested that the external table might be re-

moved by the trephine, and the state of the inner layer determined. In the list of cases produced, intra-cranial abscess happened three times—one of the patients recovering. The symptoms of intra-cranial abscess were reviewed, especially with reference to their bearing upon these three cases, and the difficulty in localizing the position of the pus. Exploration of the dura mater, and if necessary of the brain substance, was urged, in the presence of indications which might suggest intra-cranial abscess.

Goitre or Cretinism.

From the *Boston M. and S. Jour.*, April 24, 1884, we learn that a curious pathological fact is related by M. Guillaume Chapus in a memoir, "Sur les Médicins et la Médecine en Asie Centrale," which is noticed in a French journal. One town of Turkestan, Kokane by name, is composed in great part of individuals afflicted either with goitre or cretinism. The traveler is struck with the appearance of the inhabitants, who present all degrees of goitre, from a slight fullness to enormous thyroid tumors. The peculiarity in the case consists in the fact that outside this one town goitre and cretinism are very rare. In Kokane the hygienic surroundings seem to be most satisfactory. It is situated in a plain at an elevation of 1300 feet, and is abundantly supplied with pure water from a mountain stream. In 1878 the Russian troops occupied this town, and it was discovered that about a tenth part of the soldiers of the garrison became affected with goitre after a few months' stay. The tumors proved amenable to the external and subcutaneous use of iodine. It was considered prudent, however, to remove the garrison from Kokane, and another town of less pathological interest was selected as the political capital of the province.

Tenacity of Tubercle Bacilli.

It has been doubted whether the sputa of tubercular patients, which are thrown on the streets and later mix with all kind of dust, would ever cause the disease. To determine this question, Dr. Vignal (*Deutsche Mediz. Zeitung*, 1884, No. 1) has collected sputa, as they had been expectorated by phthisical persons in the streets. He mixed them with the common street dirt, moistened them, put them on a porcelain plate, suffered them to dry, again moistened them, again let them dry, and continued these experiments for a very long period of time. Then he made inoculation from these sputa in two Guinea pigs; one died a few days later from a different, accidental complaint, the other first became fat—a proof of the experimenter's good feeding—then slowly emaciated, and finally, three months later, died. The post-mortem showed a large number of tubercles, many in the state of caseous degeneration, and a great number of bacilli.

This experiment proves that the sputa collecting in the streets and on the floors of dwellings, are by no means innocuous, but serve as pathogenic elements in persons predisposed to this disease.

Albuminuria in Zymotic Diseases.

Those who have been accustomed to look upon albuminuria as an exceedingly common sequel or concomitant of scarlet fever, will be surprised to learn from the *Brit. Med. Jour.*, April 12, 1884, the following from Dr. Middleton, of Glasgow:

"He recorded his experience of the occurrence of albuminuria in the continued fevers, as observed while resident in a fever-hospital some years ago. The conclusions at which he arrived were, that albuminuria occurred in over 85 per cent. of cases of enteric and typhus; that it occurred early in both fevers, from about the end of the first week onwards, lasting generally till convalescence was thoroughly established; that abundance of albumen indicated a severe case, but severe cases were not necessarily associated with abundance of albumen; that tube-casts, hyaline, epithelial, granular, and bloody, were frequently present, and, when abundant, indicated a severe case, especially in enteric fever; and that *albuminuria was probably more common in the febrile stage of typhus and enteric than in the febrile stage of scarlet fever.*"

Sudden Death in Diabetes Mellitus.

From the *Jour. de Med. de Paris*, Feb. 9, 1884, we note that Frerichs has observed (*Zeit. f. Klin. Med.*), the mode of death in 400 cases of diabetes, a considerable number of whom died suddenly. In these instances there was one common characteristic—the final coma. This, however, developed in different ways. Sometimes death was extremely rapid, and caused by a general weakness. At other times it was not so rapid, beginning with cerebral symptoms and a form of dyspnœa, with or without cyanosis, the breath having an odor of acetone or chloroform—this form lasting from three to five days. In a third series of cases the coma gradually developed and deepened without any of

the cerebral manifestations or dyspnœa, but the breath had the same odor as that mentioned above. Frerichs thinks that in the first series the cause of death is paralysis of the heart from degeneration of the muscle; in the two latter groups, that it is brought about by a "diabetic intoxication," the poison of which is unknown, but the substitution products are acetone and acetylic acid.

Effect of Decomposed Flour.

Whenever in consequence of the eating of flour, in the form of bread or otherwise prepared, intoxication developed itself, the latter has been always ascribed to the presence of ergot. Of late it has been proven that the ptomaines (alkaloids forming in decomposing, rotten flour) cause the poisoning, and Prof. J. R. Tarchanow (*St. Petersburg Med. Wochenschrift*, 35, '83) has now demonstrated by experiments that, while the presence of ergot will increase the severity of the symptoms, make the poison more intense, the same intoxication, usually observed after eating products of flour, is produced by the ptomaines without the ergot, and that the length of deviation of the decomposition is of far greater influence on the danger of eating such flour than the presence of ergot, and that on the fifth day of decomposition the ptomaines have the most violent effect, and are then utterly uninfluenced by the presence of ergot. This seems to prove, what Virchow has long ago indicated, that the poisoning from sausages is probably also due to ptomaines.

Membranous Cast of Bowel.

To the Sheffield Medico-Chirurgical Society (meeting March 6, 1884), Mr. Edward Barber gave particulars of a case of chronic inflammation of the bowels, attended with the passage, *per anum*, of large quantities of false membrane, which were, in fact, casts of the bowel. He exhibited the quantity that had been voided in the preceding twenty-four hours. The membrane was of a soft gelatinous consistency, and of a greenish-brown color. The patient was a woman, aged 37, who had been married fourteen years, and had had no children. She suffered a good deal from neuralgia, was of a dull and desponding nature, and was beginning to exhibit symptoms of pronounced hypochondria.

Dr. Law and Dr. Banham referred to similar cases that had occurred in their own practice.

Dr. Keeling pointed out that there was an essential difference between the membranes exhibited and those given off from the uterus in cases of membranous dysmenorrhœa.

Hypodermic Injection of Anthelmintics.

Experimenting with santonate of sodium Dr. Dubois (*Allg. Med. Centr. Zeit.*. 1884, No. 1) made a hypodermic injection of sixteen grains of the drug in a dog. Shortly after, an immense quantity of seat-worms were discharged by the bowel. Not a single untoward symptom, either general or local, followed this method. It would be desirable to have this procedure tried in a larger number of cases, certainly in the human being, for our present way of eliminating worms still leaves a great deal to be desired. Some of the anthelmintics have a miserable taste, or, to be effective, they have to be swallowed in larger, and again in others, in often-repeated doses. The subcutaneous method, if successful, would soon simplify matters and more exactly define the doses neeessary, and the irritation of the intestinal canal would be avoided. There are many persons suffering from worms in our country; and many a reader may now have the chance of increasing his reputation and enriching our knowledge by determining the question raised.

Extraction of Teeth by India-Rubber Bands.

In pursuance of this subject, which we mentioned some time since, we note the following in the *Brit. Med. Jour.*, April 12, 1884, from the pen of Dr. H. W. Peard:

In answer to "M. B.'s" query, I would say that the smaller red rubber-bands, such as are used for putting around papers, etc., are capital things for extracting teeth, when applied sufficiently tightly. I used these bands (about two-thirds of an inch in diameter) successfully in two instances. There is no special method, that I am aware of, in using these bands; it is only necessary that one should be twisted several times around the tooth, as close to the gum as possible. The period between the application of the band and the extraction varies, as well as I can ascertain, from one to four days. My experience, I must add, has as yet been only of incisors and bicuspids.

The Poison of Diphtheria.

The Empress of Germany has awarded the prize for the best work on diphtheria to Professor Otto Heubner, in Leipsic. He proves that in case of suppressed circulation (by occlusion of the capillaries) in the submucosa, œdema, inflammation, and mortification with formation of false membranes, issues in the mucous membranes (Cohn's view); that the poison of diphtheria is still as unknown as that of morbilli, scarlatina,

etc., and that that form of diphtheria heretofore artifically developed in animals *is by no means identical with that observed in human beings;* and that any substance, causing the above-mentioned morbid condition (occlusion of vessels of supply) will give rise to artificial diphtheria. The proof is clear, and upsets all American discoveries of the micrococcus of diphtheria.

Resection of the Rectum.

Especially in older age, prolapsus of the rectum sometimes is a very annoying symptom. Prof. Mikalicz, in Krakau (*Gazeta Charsha*, 1883, 47) dissected off a 76 ctm. long piece of the rectum. The success was a brilliant one. No untoward symptoms developed themselves, and the case was a radical cure. He simply cut off the whole prolapsed part, save one inch of it; to this he applied the necessary sutures, and then made a reposition of the stump. Dr. Weinlechner (*Deutsche Mediz. Zeit.*, 1, 1883,) at the same time presented to the Vienna Medical Society a woman, æt. 61, in whom he had applied a ligature, in this way cutting off the prolapsed part. On the sixth day from the commencement of the strangulation the prolapsed part dropped off, and the patient was permanently cured.

An Enormous Urinary Calculus.

From the *Med. Times and Gaz.*, March 22, 1884, we learn that at a meeting of the Calcutta Medical Society, Dr. Cayley gave an account (*Indian Medical Gazette* for January) of a case of calculus occurring in a native about fifty years of age, who had for some three years suffered from symptoms of stone, which of late had become very urgent. Lateral lithotomy was attempted, but could not be executed on account of the great depth of the perinæum, and the large size of the calculus. Even after the suprapubic operation had been undertaken, its extraction was found very difficult, as it nearly filled the bladder. When removed, it weighed 25½ ounces. The patient died two days after the operation, and no autopsy was permitted.

Abscess of the Kidney.

In *Prager Med. Woch.* No. 47, 1883, we note that J. Singer reports the case of a man, æt. 25, who, when seven years old, had a fall, from which he had hæmaturia; since that time he has had occasional pain in the region of the left kidney. After an attack of typhoid fever he began to pass blood and pus in the urine, and on examination a fluctuating tumor was found in the left hypochondrium. The tumor then began to disappear, and the man recovered. Singer thinks that the abscess must have discharged into the pelvis of the kidney.

Vicarious Hemorrhage from One Mamma.

The thirty-years-old wife of a peasant asked Dr. P. Beloussow (*Deutsche Med. Zeit.*, 16, 1884,) for advice concerning a secretion of blood from her left mamma. Her menses had made their appearance when she was fifteen years old; in her twenty-fifth year they had suddenly ceased, and after five years of amenorrhœa reappeared, but in a very moderate degree, and simultaneously blood had come drop by drop from the breast. This symptom has since continued without any interruption, only the secretion of blood from the mamma becomes augmented in quantity during menstruation.

B. really succeeded several times in causing a dropping of blood from the mamma by a very light touch; the blood was dark and coagulated.

Can a Man Affected with Syphilis Communicate the Disease to a Healthy Fœtus without Infecting its Mother? Can a Man Beget a Syphilitic Child without Infecting its Mother?

Dr. William R. D. Blackwood discusses this question in the *Med. Times*, April 19, 1884, and thus concludes from the observation of three cases in his late experience:

"The three cases herein noted show, to my mind at least, that, first, a fœtus carried by a non-syphilitic mother and begotten by a non-syphilitic father *can be syphilized* before birth, and the mother *escape constitutional taint;* and, second, that a healthy woman may conceive through a syphilitic husband, give birth to a *syphilitic child*, and, notwithstanding, *escape constitutional taint.*"

Disturbance of Vision and Menstruation.

In the meeting of the French Academy of Medicine of February 19, 1884 (reported originally in the *Deutsche Mediz. Zeitung*, February 25, 1884), Dr. Dor mentioned the case of a young girl, suffering from intermittent hemorrhages of the aqueous humor. As soon as the menses made their appearance, the bleeding in the eyes ceased. In a second case, also of a girl, he found her suffering from hysterical amaurosis. The most searching examination of the eyes failed to reveal any morbid lesion, or the least structural change. The amaurosis disappeared when the menses set in, and the young girl had later normal vision.

Simulation of One-sided Blindness.

To discover simulation of one-sided blindness Dr. Bravais (meeting of French Acad. of Med., February 19, c. report *Deutsche Med. Zeit.*, 16, 1884,) recommends the method of Snellen. This latter consists in the fact that if one writes with a red pencil on paper, the letters written cannot be recognized if seen through red glass. If one holds before the apparently healthy eye a red glass, and before the pretended blind eye any kind of glass, or none at all, and requests the simulator to read the red letters on the paper (which have not been before shown to him) and he can read them, the evidence of his simulating is clear; for if the second eye had really been blind, he would not have been able to recognize the red letters through the red glass.

Varicella Nephritis.

Prof. Henoch tells us in a recent issue of the *Berlin Klin. Woch.* that he has never read of nephritis following varicella, and yet he has recently observed four cases. In all the cases, at the end of from eight to fourteen days from the appearance of the eruption, there was œdema with albuminous urine and tube casts. In three of the cases, recovery took place in a few weeks, under the use of diaphoretics, with Bilin water or acetate of potash as a diuretic. One, a girl aged two years, who was the subject of congenital syphilis, died; and after death there were found œdema of the lungs and hypertrophy of the left ventricle.

CORRESPONDENCE.

Cretaceous Deposit in the Placenta.

EDS. MED. AND SURG. REPORTER:—

I notice in the issue of May 3, 1883, of the MEDICAL AND SURGICAL REPORTER an article from the pen of Dr. W. H. Dearing, of Malvern, Iowa, entitled "Partial Ossification of the Uterine Surface of the Placenta." While visiting in Iowa last September, I was called in consultation to a case of obstetrics, of which the above cited case reminds me:

The woman, a primipara, aged 27; labor tardy. This was probably caused by a slight narrowing of the inferior strait of the pelvis. After waiting nearly twenty-four hours, it was decided to deliver instrumentally. This was done without trouble or accident, save a very slight rupture of the perineum; the placenta also came away without trouble, but on examining it my friend, Dr. W., called my attention to its uterine surface, which was completely covered with what seemed to be calcareous deposit. Knowing that the water in that section was highly impregnated with lime salts, and thinking this the probable cause, and that it *might* be a frequent occurrence in this locality, it was dismissed from my mind till seeing a case related by a physician residing in the same State.

W. H. DUDLEY, M. D.

Norwich, Conn.

Note to Article on Hemorrhages of the Ear.

EDS. MED. AND SURG. REPORTER:—

In the MEDICAL AND SURGICAL REPORTER of March 29, 1884, I omitted to notice that in case of falls upon the head, bleeding of a severe and protracted nature takes place from one or both ears, followed by the escape of clear fluid, and this is one of the important and characteristic signs of fracture of the base of the skull. This fluid is from the subarachnoid space. Sometimes a serous discharge may come from the labyrinth, and this is to be distinguished from the cerebro-spinal fluid by the large quantity of albumen which it contains, and which can be coagulated by heat and nitric acid. The cerebro-spinal fluid contains double the quantity of chloride of sodium, and only a trace of albumen, so as not to be coagulated by heat and nitric acid. I also notice in my work on "Diseases of the Ear," p. 116, that at times severe bleeding takes place after removal of fibro-gelatinous polypi from the ear, but is generally relieved by syringing the canal with ice water. Hemorrhage frequently follows the operation of Wilde's incision for deep-seated abscess or perforation of the mastoid cells, but fortunately pressure can be applied with a pledget of cotton saturated with Pancoast's styptic solution or the persulphate of iron. If the transverse sinus is opened by mistake, this is to be plugged with ivory or wood. (p. 196, op. cit.) In Bright's disease of the kidneys, I have found the middle ear filled with blood, being a vicarious hemorrhage which destroyed the integrity of the hearing by pressure upon the labyrinth.

LAWRENCE TURNBULL, M. D.

Philadelphia.

A Case of Conception Without Intromission.

EDS. MED. AND SURGICAL REPORTER:

Mrs. A———, aged nineteen, a native of Ireland, called on me for an examination. She had menstruated regularly and comfortably until after her marriage, some three months previously. As coition was out of the question, her condition seemed to her a mystery. On examination, I found the hymen closing the os externum.

After a long and diligent search, found a foramen close under the urethra, where I depressed the hymen half an inch, and introduced a number eleven bougie, and with my finger in the rectum, succeeded in penetrating a distance of nearly two inches through the firm, inelastic hymen, when the point plunged into the vagina. This condition was undoubtedly congenital.

All of her symptoms indicated pregnancy. Dilation was tried without success, then I operated with director and scalpel.

In six months after, I attended the lady in confinement, which was normal, and she had a good recovery. In this case the spermatozoa were abandoned in the depression of the hymen, and traveled through the narrow channel two inches

long into the vagina, and continued their journey to the uterus to fecundate the ova.

This fact, with others of the same kind, demonstrate not only the possibility, but the actual accomplishment of impregnation, where the spermatozoa were abandoned a long distance from the uterus.

H. E. Longshore, M. D.

Philadelphia, Pa.

Treatment of Pruritus Ani.

Eds. Med. and Surg. Reporter:—

E. R. S. asks for a treatment of pruritus ani, and also of ascarides. The causes of pruritus ani are either general or local. Sometimes the cause is entirely local; but most frequently it is both general and local. These causes should be, if possible, ascertained. The patient should be instructed to wash his anus well with a cloth wet with cold water immediately after each action of the bowels—this cleanliness is an exceedingly important agent in the treatment of the disease—and after so washing and drying himself, to bathe his anus well with the following:

℞.	Hyposulphite of soda,	ʒj.
	Carbolic acid,	grs. x.
	Glycerine,	ʒj.
	Aqua distil.,	ʒvij. M.

For a lotion.

Whenever the itching returns the application of the lotion is to be repeated and continued until the disease is arrested. Sometimes a good result is obtained by dusting over the anus the following:

℞.	Iodoform,	ʒj.
	Tannic acid,	grs. x. M.

For a powder. Use two or three times a day.

I have found an injection of two ounces of an infusion of pulv. aloes (ʒj. to the pint of boiling water), night and morning, with a teaspoonful or two, twice or thrice a day, for three or four days, of the following mixture, to be most efficient in the removal of ascarides:

℞.	Santonin,	℈j.
	Pulv. jalap.,	ʒij.
	Fld. ext. spigelia,	ʒj.
	Fld. ext. senna,	ʒss.
	Syrup sarsaparilla comp.,	ʒjss. M.

Shake well. Sig., Dose, one to two teaspoonfuls three times a day, followed in a few days, if indicated, with suitable doses of mur. tinct. of iron in an infusion of quassia.

J. B. Johnson, M. D.

Washington City, D. C.

Treatment Wanted.

Eds. Med. and Surg. Reporter:—

I have been treating the following described case for about eight months with but little success. If some of your readers would give a treatment for it, it would greatly oblige both me and my patient:

Female; age, fifty-seven years. Change of life occurred about eight years ago. Has been healthy, with the exception of the present trouble, ever since. Weighs about 145 pounds. Tall, light complexion, good appetite. Her trouble consists in an intense pain at the pit of stomach, which will dart to the region between shoulders, or small of back, thence back to pit of stomach; pulse, 72 to 80, very full and strong; temperature, normal; bowels and kidneys regular. The attacks are usually preceded by pain in left foot and ankle, and sometimes left leg, and end by severe vomiting of a large quantity of bile which produces prostration. When cut short by morphine, it requires from one to four days for recovery. The attacks occur irregularly, with an intermission of from five days to three weeks.

My treatment has been varied. I am always compelled to give, sooner or later, morphine by hypodermic injection, which always makes her very sick. Other narcotics, as bromide of potash and chloral hydrate combined, chloroform, laudanum, paregoric, have been tried without relief, while chlorodyne was used with relief for a while only. Treatment in intermission consisted in giving quinine, muriate of ammonia, arsenic, phosphate of soda, and tonics (iron, arsenic, strychnia, etc.,) quinia doing the most good of these. During one attack, I attempted bleeding, but succeeded in taking only a little blood; the attack, however, was short and light.

Reelsville, Ind. G. W. S., M. D.

Salicylic Acid in Cerebro-Spinal Meningitis.

Eds. Med. and Surg. Reporter:—

In the Reporter of March 29th, I notice a malicious personal reply, by Dr. J. B. Weener, to an extract in your number of March 8th, from an article published by me in the February number of the *St. Louis Cour. of Med.*

The article in question was read three months or more before its publication, at the meeting of our County Medical Society—Dr. Weener being present and president of the society.

After the paper was read, and in the presence of the members present at that time, he arose and said that he could testify to the good effects of the salicylic acid in cerebro-spinal meningitis, but never once making any claim whatever to priority in using it.

Among the physicians present were Drs. E. V. Spencer and S. H. Pearse, of this place, Dr. L. B. Bitz, of Blairsville, and Dr. E. H. Gregory, of St. Louis, Mo.

The article was prepared especially for the County Medical Society, I having been appointed to read a paper at that meeting; and being advised by two prominent medical men to publish it, remembering a principle inculcated from my preceptors, that whether young or old, if you know you have learned something that is valuable to the profession, make it known, or you will be doing a great wrong, I did so.

For two years after the occurrence of the epidemic here, I investigated the subject thoroughly, and read the history of epidemics that occurred elsewhere; and it was only after deliberation of this character that I became aware of the value of my success with this treatment. Neither Dr. J. B. Weener nor any other person ever suggested to me a single idea or word that occurs in my original article. I used the salicylic acid in solution, prescribing liq. ammon. acetat. as the solvent.

My age and conditions of partnership once made with Dr. Weener are of course strong (?) arguments against the value and truthfulness of my

statements, and deeply interesting (?) reading for a medical profession hunting for something practical.

As to there being in our profession "young men who like to air themselves, appear in print, and have their names sounded abroad in the land," it has also been said that there exist within our ranks old men, who are fogies, croakers, and have petty professional jealousies, that influence them to such an extent, if seeing an article in a medical journal with the name of a professional neighbor (younger than themselves) attached to it, they write a reply (never having had anything occur, in a practice of twenty years or more, in their opinion worth publishing), giving the author's age, claiming the idea as their own and only, and inclosing it with great care in personal insinuations.

At least, it is queer that one would at so late a date, after a paper being read in his presence before a body of medical men, make such a statement, and publish it in a journal foreign to the one in which the original was published.

I would have replied sooner, but could not until now obtain a copy of the REPORTER which contained the statement. D. C. RAMSEY, M. D.

Mt. Vernon, Ind.

NEWS AND MISCELLANY.

Tuberculosis.

A CARD FROM DR. SHAKESPEARE.

Dr. Shakespeare, in discussing the question of tuberculosis, opened by Dr. Formad at the recent meeting of the American Medical Association, stated that he had accepted the invitation of the committee under a misapprehension of the extent of time that would be devoted to the consideration of this most important matter. He did not believe that a mere expression of opinions, without a full examination of the grounds upon which they are based, could have any weight in the settlement of such grave questions in pathology. The time allotted for this discussion could neither do justice to the subject, nor credit to the Association or those taking part in the debate. With this protest, he expressed himself as follows:

1. He admitted, as absolutely proven, that the tubercle bacillus is usually present in tuberculous lesions; that it is usually present in the sputum of phthisical patients; that when present it constituted a most valuable diagnostic sign of the presence and activity of the tuberculous process; that it has characteristics by which it can be easily and certainly distinguished from other known bacilli.

2. He considered it established, by overwhelming evidence, that the tuberculous process once started in any part, other portions of the animal economy can thence become *infected* by transportation of the pathogenic agent.

3. He regarded it as demonstrated, that there is *something* in the tuberculous lesions of one animal which, when transported to and properly implanted in the tissues of another animal "receptive" or predisposed to the disease, can excite the tuberculous process in that animal.

4. He believed it amply proved that the tubercle bacillus is virulently capable of exciting and continuing the tuberculous process in living beings when, after introduction, it meets conditions favorable to growth and propagation.

5. He thought that there exists abundant support for the belief that the human race is largely "receptive" or predisposed to the tuberculous process, and he could not escape the conviction that the tuberculous process in man and in lower animals is essentially the same, with respect to its cause and its course.

5. He therefore was forced consistently and logically to admit that tuberculosis is often an infectious disease, and is often caused by the tubercle bacillus acting as a specific pathogenic parasitic agent.

On the other hand, whilst he was not now ready to concede that, by actual proof, it has been shown that no other agent than the tubercle bacillus can excite the tuberculous process, heat the same time most strenuously denied that it has been satisfactorily proven that anything else is endowed with such a power.

Entertaining these views, he recognized the importance of the destruction of excretions containing bacilli or their spores, and so appreciated the danger of possible infection of the well by the sick, that he would forbid the occupation of a common bed in private dwellings, and would, when possible, isolate phthisical patients in hospitals from those otherwise afflicted.

During his remaining time, Dr. Shakespeare adversely criticised Dr. Formad's acceptation of the ætiology of tuberculosis.

In the first place, the methods which had been followed of preparation of sections of tissue for microscopic examination were not only incapable of demonstrating peculiarities in the lymph spaces of connective tissue, but they were not such as would make the lymph spaces extremely difficult, if not indeed quite impossible to see at all. In the second place, the tissues examined comprised only the cutis, the subcutaneous connective tissue, and the intermuscular connective tissue. The investigation did not extend to the lymph spaces of the lungs, the liver, the spleen, the kidneys, or the brain. Yet every one well knows that it is not in the skin or in the intermuscular connective tissue that the tuberculous process works, but almost always in the above-named viscera. In the third place, Dr. Formad unknowingly has himself laid the foundation of an objection to his theory, which by itself is fatal to it. He distinctly states that the peculiarities of lymph spaces in the connective tissue of the so-called scrofulous animals and men are not observable in the perivascular lymph spaces. He also most positively states that it is just in the perivascular lymph spaces that not only secondary miliary tubercle, but also primary tubercle, originates, and this is a well-known fact, of which every pathologist is cognizant. What then has an assumed peculiarity of lymph spaces in a tissue not subject to tubercule, to do with the etiology of the formation of tubercles in a location where the lymph channels are unobstructed, and where, by Dr. Formad's own admission, they appear the same in the scrofulous as in the non-scrofulous?

Furthermore, Dr. Formad mistakes, in his the-

ory, a *predisposing* for an *exciting* cause. When he shall have demonstrated beyond the possibility of doubt, this assumed peculiarity in the anatomy of the scrofulous, nothing more will have been done than an explanation given of the well-known *predisposition* certain animals and men have towards tuberculosis. Such a peculiarity could only enhance the power which the *exciting* case of tuberculosis may have, by making its work more easy. It certainly would favor, not antagonize, the action of the tubercle bacillus.

Are a Physician's Carriage and Harness "Tools of his Occupations?"

A suit of considerable importance, especially to country physicians, was recently tried in New Hampshire. The question at issue was whether a physician who was in debt could keep from his creditors his carriage and harness under the provisions of the statute, which exempted from execution tools of a person's occupation. The decision was as as follows:

"The court cannot say, as a matter of law, that a wagon or a harness is a tool of a physician's calling, and so exempt to all physicians, nor can they say that it is not such a tool. The most that can be said, as a matter of law, is that it may be a tool of his profession, if, in the particular case, it is reasonably necessary for him to use it as a tool. If it should appear that his practice was confined to his office, or that he was a physician or surgeon in a hospital, attending to no cases outside of the institution, or that he was a surgeon on shipboard, or that he went on foot, or on horseback, or on the cars, to visit his patients, a wagon and harness would not be exempt under our statute, because they would be of no use to him as tools in his practice.

"They might be of use to him in other respects, as in going to church, or in carrying his children to school, or in visiting friends, or as a means of recreation and pleasure; but these uses are manifestly not within the legitimate scope of the technical duty of a physician. Not coming within the strict definition of the term tools, and not being reasonably necessary as tools for him in his practice of his profession, they would not be tools within the meaning of the statute, and so would not be exempt as such.

But if it should be found that the physician claiming the exemption could not practice his profession with reasonable success without a team with which to visit his patients—that he was located in a country town, for example, where it was necessary for him to ride a large part of the time in order to accomplish anything professionally—a wagon and harness might properly be found to be reasonably necessary for him as tools of his occupation. But the finding would be one of fact, so far as the reasonableness of the use is concerned, and it could not be said that these articles are exempt to every physician, or to physicians generally, but only to the debtor in the particular case. If there is any doubt whether an article claimed to be exempt from attachment is a tool under the Statute, the question should be submitted to the jury whether its use as a tool by the debtor in his business is reasonably necessary. If it is, it is exempt; otherwise, it is not exempt."

Nurses in Pest-Houses.

A recent case in a New England State touched on the authority of health officers to employ nurses, at the expense of the town, to attend on persons committed by them to the pest-house, and the court said:

"Having power to compel the confinement of infected persons and prevent their communication with others, and having exercised this power, it became their duty to provide for the wants of those confined there.

"They could not shut them out from communication with their friends and with the world and deprive them of any means of obtaining assistance, and at the same time lawfully withhold necessary support and care.

"They could not establish a hospital without ordinary hospital accommodations, and they could not make the hospital a place of involuntary confinement, and escape the duty of supplying the reasonable wants of those who by confinement and seclusion were prevented from applying to any one else for relief. They could not furnish relief against the will of those confined, and afterward recover the expense from them or from those liable in law to support them. If the health officers were obliged by law to confine persons infected with dangerous diseases, and it was their duty to nurse and support them, and if they could not recover the reasonable expense from them or their guardians, they would be remediless unless they could charge the expense upon the city. The law does not require the performance of a duty, and at the same time withhold the means reasonably necessary to its performance."

A Bar to Malpractice Suits.

A case tried not long since in one of the Western States brought up the question whether a successful suit by a physician for the value of his services did not bar any subsequent suit by the patient for malpractice, and it was held that it did. The first suit was litigated to decide the point of the value of the services, and although the charge of malpractice was not directly made as in the second suit, yet if there had been any malpractice there would, of course, have been no value to the services. The failure to make the charge in the first suit was held to forever prevent its being raised afterwards.

Capital Punishment in Delaware.

The Governor of Delaware not long since reprieved a criminal under sentence of death for the long term of *fifty-six* years. The law of the state forbade the commutation of death sentences, but permitted reprieves. There seemed to be some mitigating circumstances in the case in question, and the Governor wished to exercise clemency, but could not under the law, except in the way stated. The case may have been a deserving one, but the method adopted was certainly a palpable evasion of the Statute.

Errata.

On page 612 (May 17), line 18 from top, for $\frac{7}{8}$ *inch* read 7 by 8 inches.

Items.

—An unknown country editor sarcastically remarks: "If many people knew how to pay their subscriptions as well as they know how to run a newspaper, editors would have an easier time of it."

—In the *Columbus Medical Journal*, May, 1884, Dr. B. M. Ricketts reports a case of scarlet fever resulting in abscesses of the neck and elbow joint, with ankylosis, perforation of right tympanum, and total destruction of right cornea.

—Prof. Voltolini, in Breslau, has often noticed that discharge from the ear was followed by tubercular phthisis of the lungs, and *vice versa*. He has recently examined the discharge, and discovered bacilli in it, a proof of the causal connection.

—At the Berlin University are at present matriculated (having either the certificate of the gymnasium, or passed the necessary examination regarding their classical education), 4635 students; of these, 898 study medicine, and of these 180 are from Berlin, 27 from Russia, 22 from America, and 7 from Japan.

—Of the physicians who died during 1883 in England, the *Lancet* mentions these 35 as having reached a high age as follows: Two 95, two 94, two 92, one 91, two 90, one 89, three 88, three 87, five 86, two 85, three 84, four 83, one 82, and four 80, while a far larger number lived more than 70 years.

—According to a report in the Wratsch (transl. Physician, a Russian weekly medical paper), on November 28, last year an epidemic of cholera broke out in the girl's Puschkin-school in Moskau. Within fifteen minutes eighteen of the girls were seized by the disease, which, however, soon disappeared. It probably was hysteric in character.

—Prof. Henoch, the celebrated authority on diseases of children at the Berlin University, has demonstrated the occurrence of kidney complication in varicella, and published four cases in evidence. It may be better to pay the same attention to children suffering from varicella, as is done to those attacked by scarlatina, *i. e.*, keep them in the room, and guard them against chilling of the skin.

—The following report shows the value of ostrich farming going on in Southern California: "The ostriches on the Anaheim farm laid 305 eggs during the season from the 1st of May last until the 1st of October. The birds have been plucked twice since their arrival on the farm. The first clip, in May last, yielded $500. The clip in December yielded 2,500 quills of all kinds, from 18 birds, and is valued at $1,000.

—Vomacka gives the following directions for the preparation of a substitute for blue ointment, which also keeps better: One part of soft and perfectly neutral potash soap is mixed with a little glycerin in a glass mortar, and one part of mercury is added with constant trituration. When no globules of mercury are any longer visible, add two parts more of potash soap to make four parts. It may be scented with lavender or other essential oil.

—At a meeting of the Alumni of Jefferson Medical College held to take action respecting the death of Dr. J. Marion Sims, the late Prof. S. D. Gross said, "This man died poor." Thus it appears that this man, the most courted of any doctor that ever lived, by all classes, among the noble and crowned heads, died poor. What shall he expect who lives his professional life among the operatives of farms, factories, stores, etc. Can he expect to die richer than one who had for his services any sum he might ask? Truly, the practice of medicine is a poor business, whatever may be said of it as a profession.

—Prince Carl Theodore, of Bavaria, who graduated as M. D., and has gained well-merited local reputation as an eye physician, was recently honrred by the University of Munich, which gave him the honorary doctor diploma. Prinz Ferdinand of Bavaria has also finished his medical studies, and passed his examination as M. D. Both having also passed the German State's examination, are legally entitled to practice. The older, Carl Theodore, has become widely known by the publication of a work on the comparative anatomy of the tongue, which is an evidence of deep learning. It is said that he wrote the work under supervision of Prof. Rüdinger.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Is com. tinct. avena sativa, as found in the shops, what it purports to be, viz.: a pure tincture of common oats? If so, was it not *mistakenly* omitted from the last revision of the Pharmacopœia? I have known a number of sufferers from painful nervous disorders to be much relieved by it. Is any sophistication of a narcotic nature known to be practiced in its preparation? A DOCTOR.

MARRIAGES.

BARNES—SAINT.—At the residence of the bride's parents, Sharpsburg, Allegheny county, Pa., on Thursday morning, April 24, 1884, by Rev. S. M. Bell, assisted by Rev. W. M. Eaton, of Washington, Pa., Samuel S. P. Barnes, M. D., of Massillon, Ohio, and Emily J., daughter of James Saint, Esq.

HARE—PEMBERTON.—In this city, Thursday, May 8, 1884, Dr. Hobart Emory Hare and Rebecca Clifford, daughter of Clifford Pemberton, Esq.

HAYS—HOLEMAN.—At the residence of the bride's father, in Louisville, May 13, 1884, Dr. H. H. Hays, of New Liberty, Ky., and Miss Anna W. Holeman.

HINKLE—CAMPBELL.—At Arch Street Presbyterian Church, May 19, 1884, by the Rev. John S. Sands, Dr. Frank Whitehill Hinkle, of Buffalo, and Kate Allen Campbell, of Philadelphia.

DEATHS.

BLAUVELT.—In New York, Saturday, May 17, 1884, Jas. F. Blauvelt, M. D., in the sixty-first year of his age.

FLAGG.—At Yonkers, N. Y., May 15, 1884, L. W. Flagg, M. D., aged sixty-seven years.

HARLEY.—In Cincinnati, Ohio, May 16, 1884, Dr. E. T. Harley.

HIBBARD.—At Elizabeth, N. J., May 17, 1884, of apoplexy, Dr. Rufus F. Hibbard, in the eightieth year of his age.

HUNTER.—At Macon, Tenn., May 12, 1884, Dr. George Alva Hunter, brother of R. E. Hunter, of Memphis, in the thirty-seventh year of his age.

ROGERS.—In Sparta, Ga., May 14, 1884, by lightning, Dr. Wilbur J. Rogers.

TINDALL.—In Aberdeen, Miss, May 15, 1884, Dr. John L. Tindall, over forty years in the medical profession.